

Match Listing for
Sequence 09 / 964824

```

/gene="KIAA0523"
/codon_start=1
/product="KIAA0523 protein"
/protein_id="BA22449_1"
/db_xref="GR:3043570_1"
/translation="ELRQRRMFHFMNSDQCPALGPEAARPAIHSRGTYIGCFSD
DGHERTIGKAVFTDKRTKTVSQCACERSVSYTAGLEAGAECTCGNNLUPAVSGLE
QANUTVGCSGCSQKEEPLAINGWQCYCAYTPRFLNDRAMDSVGGDFAERIA
ECEVYQIPQDRCTDFLENKSKVYVAWSFPGAGNTWARRHLERATGTTG
FDCTLYNGFKSEKDHRHSRRTICKEHESGREIEMDSAILIRNPYRSVAFNR
KGAGLXFAADRWSKSCMEPDVNSYASWWMSKYGRLLVVYUERLSLVP
TIREMVAHLNVSEERULCVENNEKSGFERRGRSHPEPFTPEMKDLINGIRTVD
QALRDHNMWTRGPREYER"

RESULT 2
BASE COUNT 1191 a 1340 c 1492 g 1149 t
ORIGIN 1340 c 1492 g 1149 t

Query Match 100.0%; Score 263; DB 9; Length 5172;
Best Local Similarity 100.0%; Pred. No. 2 4e-68;
Matches 263; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AACATTAACAGATTATTAACATATAACAAAAAAGTCAGAGGTAAAGCCATC 60
Db 5172 AACATTAACAGATTATTAACATATAACAAAAAAGTCAGAGGTAAAGCCATC 5113
QY 61 TCAAGCAGGTGTTGACTCTAACATACAACTTCAACAGACTGATCTTTTGCC 120
Db 5112 TCAGCAGGTGTTGACTCTAACATACAACTTCAACAGACTGATCTTTTGCC 5053
QY 121 TCTCAACTCTCCCTACTGGTCACTTCAGTGAATTCCTCAGTGTATGATCCAGGCC 180
Db 5052 TCTCAACTCTCCCTACTGGTCACTTCAGTGAATTCCTCAGTGTATGATCCAGGCC 4993
QY 181 CAGGTGGTCACTAAAGCCAGGAACTACTACTCTTTCAGATCACAGGGAA 240
Db 4992 CAGGGGTCTCATATAAGCCAGGAACTACTACTCTTTCAGATCACAGGGAA 4933
QY 241 TTAAACAGCTCTACCCACAT 263
Db 4932 TTAAACAGCTCTACCCACAT 4910

RESULT 3
BASE COUNT 15323 b 172091 bp
ORIGIN 15323 b 172091 bp
DEFINITION Homo sapiens chromosome 17 clone 2511_J_5 map 17, *** SEQUENCING IN
PROGRESS ***, 25 unordered pieces.
ACCESSION AC007962
VERSION 1
KEYWORDS HTG; HTGS; PHASE1.
SOURCE
ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homidae; Homo.
REFERENCE 1 (sites)
AUTHORS Nomura, N. and Ohara, O.
TITLE Prediction of the coding sequences of unidentified human genes. IX.
JOURNAL Submitted (13-FEB-1998) Osamu Ohara, Kazusa DNA Research Institute,
DNA Res. 5 (1), 31-39 (1998)
MEDLINE 98290545
REFERENCE 2 (bases 1 to 5172)
AUTHORS Ohara, O., Nagase, T. and Ishikawa, K.
TITLE Direct Submission
JOURNAL Submitted (13-FEB-1998) Osamu Ohara, Kazusa DNA Research Institute,
(B-mail: cdnainfo@kazusa.or.jp, Tel:+81-438-52-3913,
Fax:+81-438-52-3914)

FEATURES
source
1. -5172
/organism="Homo sapiens"
/ab_xref="taxon:9606"
/clone="HG1394"
/sex="male"
/tissue_type="brain"
/clone.lib="pBluescriptII SK plus"
1. -5172
/gene="KIAA0523"
<1. -1407

RESULTS
for SET 1 D NO: 137

```


ALIGNMENTS

for Seq ID No. 137

RESULT 1
ABL67103
ID ABL67103 standard; DNA; 263 BP.
XX
AC ABL67103;
XX
DT 15-MAY-2002 (first entry)
XX
DE Thyroid cancer related gene sequence SEQ ID NO:5440.
XX
KW Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
KW stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
KW cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
KW gene; ds.
XX
OS Homo sapiens.
XX
PN WO200194629-A2.
XX
PD 13-DEC-2001.
XX
PF 30-MAY-2001; 2001WO-US10838.
XX
PR 05-JUN-2000; 2000US-209473P.
PR 05-JUN-2000; 2000US-209531P.
PR 18-SEP-2000; 2000US-233133P.
PR 18-SEP-2000; 2000US-233617P.
PR 20-SEP-2000; 2000US-234009P.
PR 20-SEP-2000; 2000US-234034P.
PR 20-SEP-2000; 2000US-234052P.
PR 22-SEP-2000; 2000US-234509P.
PR 22-SEP-2000; 2000US-234567P.

SEARCH ID: 137 - cont -

	Db	Query
PR	25-SEP-2000; 2000US-234923P.	1 AAACATAAACAGAATTATTAGCTCATATAACAAAAAGTCAGAGGTAAGGCCAATC 60
PR	25-SEP-2000; 2000US-234924P.	61 TCAAGCAGGCTGTACTAACARTTCAACAGAACCTTACCTCTTCGGCC 120
PR	25-SEP-2000; 2000US-235077P.	61 TCAAGCAGGCTGTACTAACATTTCAACAGAACCTTACCTCTTCGGCC 120
PR	25-SEP-2000; 2000US-235134P.	61 TCAAGCAGGCTGTACTAACATTTCAACAGAACCTTACCTCTTCGGCC 120
PR	25-SEP-2000; 2000US-235280P.	61 TCAAGCAGGCTGTACTAACATTTCAACAGAACCTTACCTCTTCGGCC 120
PR	26-SEP-2000; 2000US-235637P.	QY 121 TCCRAACTCTCTTCACTGGGTCACGTCTCGTCATGCCAAGGCC 180
PR	26-SEP-2000; 2000US-235638P.	QY 121 TCCRAACTCTCTTCACTGGGTCACGTCTCGTCATGCCAAGGCC 180
PR	27-SEP-2000; 2000US-235711P.	Db 121 TCCRAACTCTCTTCACTGGGTCACGTCTCGTCATGCCAAGGCC 180
PR	27-SEP-2000; 2000US-235720P.	Db 121 TCCRAACTCTCTTCACTGGGTCACGTCTCGTCATGCCAAGGCC 180
PR	27-SEP-2000; 2000US-235840P.	QY 181 CAAGGGTCATCAAAGACCGAACTACTACCTTTCACATTCAACAGGGAA 240
PR	27-SEP-2000; 2000US-235863P.	QY 181 CAAGGGTCATCAAAGACCGAACTACTACCTTTCACATTCAACAGGGAA 240
PR	28-SEP-2000; 2000US-236028P.	Db 181 CAAGGGTCATCAAAGACCGAACTACTACCTTTCACATTCAACAGGGAA 240
PR	28-SEP-2000; 2000US-236032P.	QY 241 TAAACACGCTTACCCAGCAT 263
PR	28-SEP-2000; 2000US-236033P.	Db 241 TAAACACGCTTACCCAGCAT 263
PR	28-SEP-2000; 2000US-236109P.	
PR	28-SEP-2000; 2000US-236111P.	
PR	29-SEP-2000; 2000US-236342P.	
PR	29-SEP-2000; 2000US-236891P.	
PR	02-OCT-2000; 2000US-237172P.	
PR	02-OCT-2000; 2000US-237173P.	
PR	02-OCT-2000; 2000US-237278P.	
PR	02-OCT-2000; 2000US-237294P.	
PR	02-OCT-2000; 2000US-237295P.	
PR	02-OCT-2000; 2000US-237316P.	
PR	03-OCT-2000; 2000US-237425P.	
PR	03-OCT-2000; 2000US-237598P.	
PR	03-OCT-2000; 2000US-237604P.	
PR	03-OCT-2000; 2000US-237606P.	
PR	03-OCT-2000; 2000US-237608P.	
PR	01-NOV-2000; 2000US-244867P.	
XX	01-NOV-2000; 2000US-245084P.	
PA	(AVAL-) AVALON PHARM.	
XX	Young PE, Augustus M, Carter KC, Ebner R, Endress G, Horrigan S;	
PI	Soppet DR, Weaver Z;	
XX	DR WPI; 2002-188264/24.	
XX	Screening for anti-neoplastic agent involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, and determining a change in expression of a gene of a signature gene set -	
PS	Claim 1; SEQ ID 5440; 44pp; English.	
XX	The present invention describes a method (M1) for screening for an anti-neoplastic agent. The method involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, determining a change in expression of at least one gene (I) of a signature gene set, where (I) comprises a sequence (S) selected from 8447 sequences (given in ABL61664 to ABL70110), or is at least 95% identical to (S), where a change in expression is indicative of anti-neoplastic activity. (I) has cytostatic activity and can be used in gene therapy. M1 can be used for screening an anti-neoplastic agent, and can be used for producing a product which is the data collected with respect to the anti-neoplastic agent as a result of M1, and the data is sufficient to convey the chemical structure and/or properties of the agent. M1 can be used in the treatment of cancer such as colon, breast, stomach, lung, thyroid, oesophageal, ovarian, kidney, prostate or pancreatic cancer, adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer, infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine carcinoma, papillary carcinoma and Wilms' tumour.	
SQ	Sequence 263 BP; 85 A; 67 C; 42 G; 69 T; 0 other;	
	Query Match 100.0%; Score 263; DB 24; Length 263;	
	Best Local Similarity 100.0%; Pred. No. 2e-71; Length 263;	
	Matches 263; Conservative 0; Mismatches 0; Index 0; Gaps 0;	
	1 AACACATAACAGAATTATTAGCTCATATAACAAAAAGTCAGAGGTAAGGCCAATC 60	

SEARCH ENGINE [P]

Gencore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Title: US-09-964-824C-137

Perfect score: 263

Sequence: 1 aaacataacaagaattat.....aaacagcttccatccacagcat 263

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 16154056 seqs. 8097743376 residues

Total number of hits satisfying chosen parameters: 32308132

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

EST: *

- 1: em_estba:*
- 2: em_estbmu:*
- 3: em_estbm:*
- 4: em_estmu:*
- 5: em_estov:*
- 6: em_estpl:*
- 7: em_estro:*
- 8: em_htc:*
- 9: gb_est1:*
- 10: gb_est2:*
- 11: gb_htc:*
- 12: gb_est3:*
- 13: gb_est4:*
- 14: gb_est5:*
- 15: em_estfun:*
- 16: em_estom:*
- 17: gb_gss:*
- 18: em_gss_hum:*
- 19: em_gss_inv:*
- 20: em_gss_plin:*
- 21: em_gss_vrt:*
- 22: em_gss_fun:*
- 23: em_gss_mam:*
- 24: em_gss_mus:*
- 25: em_gss_other:*
- 26: em_gss_pro:*
- 27: em_gss_rod:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

#	Result No.	Score	Query	Match Length	DB ID	Description
1	263	100.0	263	9	AA426220	AA426220 zv8qdd01.s
2	263	100.0	300	9	A1915364	AA1915364 wd38f08.x
3	100.0	309	14	BW930947	BW930947 UI-E-EJ0-	
4	100.0	312	14	BW94449	BW94449 UI-E-EJ0-	
5	100.0	348	14	Z39512	Z39512 HSC1Bh062 n	
6	100.0	352	14	N63086	N63086 yz32e07.s1	

ALIGNMENTS

RESULT 1

AA426220 LOCUS AA426220 DEFINITION zv84d01.s1 Soares_total_fetus_NB2HF8.9w Homo sapiens cDNA clone IMAGE:7_60321 3', mRNA sequence.

ACCESSION AA426220 VERSION AA426220.1 GI:2107753 KEYWORDS EST.

SOURCE human.

ORGANISM Homo sapiens

Bukarvata; Metacoda; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homidae; Homo. 1 (bases 1 to 263)

REFERENCE Hillier,L., Allen,M., Bowles,L., Dubuque,T., Geisel,G., Jost,S., Kubica,T., Lacy,M., Le,N., Lennon,G., Marra,M., Martin,J., Moore,B., Scheibenbogen,K., Steptoe,M., Tan,F., Theising,B., White,Y., Wylie,T., Waterton,R. and Wilson,R.

TITLE JOURNAL

COMMENT Unpublished (1997)

Contact: Wilson RK Washington University School of Medicine 4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108

tel: 314 286 1800 fax: 314 286 1810

Email: est@watson.wustl.edu

This clone is available royalty-free through LBNL; contact the IMAGE Consortium (info@lilnp.gov) for further information.

Seq primer: -4lm13 fwd. ET from Amersham

High quality sequence stop: 194.

FEATURES	
SOURCE	Location/Qualifiers
ORIGIN	<p>1. .263</p> <p>/organism="Homo sapiens"</p> <p>/db_xref="IMAGE:2330439"</p> <p>/clone="IMAGE:2330439"</p> <p>/clone.lib="Soares_NFL_T_GBC_SI"</p> <p>/lab_host="DH10B"</p> <p>/note="Vector: pT7T3P-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; (total) fetus material with a Not I - oligo(dT) primer [5' TCTTACCAATCGAACGGGCCGCTTAATTGTTTTTTTTT 3']. Double-stranded cDNA was ligated with Not I and cloned into the Not I (Pharmacia), digested with Eco RI adaptors and Eco RI sites of the modified pT7T3 vector. Library went through one round of normalization, and was constructed by Bento Soares and M. Fatima Bonaldo."</p>
BASE COUNT	85 a 67 c 42 g 69 t
ORIGIN	<p>Query Match 100.0%; Score 263; DB 9; Length 263;</p> <p>Best Local Similarity 100.0%; Pred. No. 4 3e-61;</p> <p>Matches 263; Conservative 0; Mismatches 0; Indels 0; Gaps 0;</p> <p>QY 1 AAACATAAACAGAATTATTAGTCATATAACAAAAAAGTCAGAGCTAACGCCAATC 60</p> <p>1 AACAAATAACAGAAATTATTAGTCATATAACAAAAAAGTCAGAGCTAACGCCAATC 60</p> <p>QY 61 TCAAGCAAGCTGTAGTCGTACTAACAAATTACCAAGAGCTTGATCTCTCC 120</p> <p>61 TCAAGCAAGCTGTAGTCGTACTAACAAATTACCAAGAGCTTGATCTCTCC 120</p> <p>QY 121 TCTCAACTCTCCCTCACTGGTGTCACTTGATCTCCAAAGGCC 180</p> <p>121 TCTCAACTCTCCCTCACTGGTGTCACTTGATCTCCAAAGGCC 180</p> <p>Db 121 TCTCAACTCTCCCTCACTGGTGTCACTTGATCTCCAAAGGCC 180</p> <p>QY 181 CAAGGTGCATCATAAACACCAGGAATACTACTCTTTCACATCAAGGGGA 240</p> <p>181 CAAGGTGCATCATAAACACCAGGAATACTACTCTTTCACATCAAGGGGA 240</p> <p>Db 241 TAAACACAGCTCTACCGAGCAT 263</p> <p>241 TAAACACAGCTCTACCGAGCAT 263</p> <p>Db 241 TAAACACAGCTCTACCCAGCAT 263</p>
RESULT 2	
A1915364	<p>LOCUS A1915364 300 bp mRNA linear EST 17-DEC-1999</p> <p>DEFINITION wd38108_x1 Soares_NFL_T_GBC_SI Homo sapiens cDNA clone IMAGE:2330439 3', mRNA sequence.</p> <p>ACCESSION A1915364</p> <p>VERSION A1915364.1</p> <p>KEYWORDS EST.</p> <p>SOURCE</p> <p>ORGANISM Homo sapiens</p> <p>Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.</p>
REFERENCE	1 (bases 1 to 300)
AUTHORS NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.	
TITLE National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index.	
JOURNAL Unpublished (1997)	
COMMENT Contact: Robert Strausberg, Ph.D.	
This clone is available royalty-free through LILN ; contact the IMAGE Consortium (info@image.lnl.gov) for further information.	
Insert Length: 459 Std Error: 0.00	
Seq Primer: 40UP from Gibco	
High quality sequence stop: 272.	
location/qualifiers	
FEATURES	1. .300
source	/organism="Homo sapiens"

Clone Distribution: Researchers may obtain clones from Research Genetics (www.resgen.com).

The following repetitive elements were found in this cDNA sequence: 276-305, >AT-rich#Low_complexity (matched compliment) Seq primer: M13 REVERSE.

FEATURES

Source

i . 309
/organism="Homo sapiens"

/db_xref="taxon:9606"
/clone="UI-E-EJ0-aip-a-08-0-UI"

/tissue_type="fetal eyes, lens, eye anterior segment,
optic nerve, retina, Retina Foveal and Macular, RPE and
Choroid"

/dev_stage="fetal and adult"

/lab_host="DH10B (Life Technologies) (T1 phage resistant)"

/note="Organ: eye; Vector: pT73-Pac (Pharmacia) with a
modified polylinker; Site_1: EcoR I; Site_2: Not I;

UI-E-EJ0 is a subtracted cDNA library constructed

according to Bonaldo, Lennon and Soares, Genome Research, 6-791-806, 1996. First strand cDNA synthesis was primed with an oligo-dT primer containing a Not I site. Double stranded cDNA was ligated to an EcoR I adaptor, digested with Not I, and cloned directionally into pT73-Pac

vector. The oligonucleotide used to prime the synthesis of

first-strand cDNA contains a library tag sequence that is

located between the Not I site and the (dr18 tail. The

sequence tags for this library are: fetal eyes, AGATAAGA

; lens, CGATAGCA; eye anterior segment, ATGGCCAT;

optic nerve, CCATTAAGTC; Retina, CCGCG; Retina Foveal and

Macular, GICC; RPE and Choroid, ACCTA. This library was

created for the program Gene Discovery in the Visual

System, supported by National Eye Institute (NEI)."

BASE COUNT

ORIGIN

Query Match 100.0%; Score 263; DB 14; Length 309;
Best Local Similarity 100.0%; Pred. No. 4.5e-61;
Matches 263; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

FEATURES

Source

i . 312
/organism="Homo sapiens"

/db_xref="taxon:9606"
/clone="UI-E-EJ0-aip-a-08-0-UI"

/tissue_type="fetal eyes, lens, eye anterior segment,
optic nerve, retina, Retina Foveal and Macular, RPE and
Choroid"

/dev_stage="fetal and adult"

/lab_host="DH10B (Life Technologies) (T1 phage resistant)"

/note="Organ: eye; Vector: pT73-Pac (Pharmacia) with a
modified polylinker; Site_1: EcoR I; Site_2: Not I;

UI-E-EJ0 is a subtracted cDNA library constructed

according to Bonaldo, Lennon and Soares, Genome Research, 6-791-806, 1996. First strand cDNA synthesis was primed with an oligo-dT primer containing a Not I site. Double stranded cDNA was ligated to an EcoR I adaptor, digested with Not I, and cloned directionally into pT73-Pac

vector. The oligonucleotide used to prime the synthesis of

first-strand cDNA contains a library tag sequence that is

located between the Not I site and the (dr18 tail. The

sequence tags for this library are: fetal eyes, AGATAAGA

; lens, CGATAGCA; eye anterior segment, ATGGCCAT;

optic nerve, CCATTAAGTC; Retina, CCGCG; Retina Foveal and

Macular, GICC; RPE and Choroid, ACCTA. This library was

created for the program Gene Discovery in the Visual

System, supported by National Eye Institute (NEI)."

BASE COUNT

ORIGIN

Query Match 100.0%; Score 263; DB 14; Length 312;
Best Local Similarity 100.0%; Pred. No. 4.5e-61;
Matches 263; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT

4 BM684449

LOCUS 312 bp mRNA linear EST 27-FEB-2002

DEFINITION UI-E-EJ0-aip-a-08-0-UI.s1 UI-E-EJ0 Homo sapiens cDNA clone

ACCESSION UI-E-EJ0-aip-a-08-0-UI 3', mRNA sequence.

VERSION BM684449.1 GI:18994345

KEYWORDS human.

SOURCE Homo sapiens

ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 312)
AUTHORS Bonaldo, M.F., Lennon, G. and Soares, M.B.
TITLE Normalization and subtraction: two approaches to facilitate gene discovery

JOURNAL Genome Res. 6 (9), 791-806 (1996)

MEDLINE 9704477

COMMENT Contact: Soares, MB

Program for Rat Gene Discovery and Mapping

University of Iowa

451 Eckstein Medical Research Building Iowa City, IA 52242, USA

Tel: 319 335 8250

Fax: 319 335 9565

Email: msoares@blue.weeg.uiowa.edu

Tissue Procurement: Dr. Gregg Hageman

cDNA Library Preparation: Dr. M. Bentto Soares, University of Iowa

DNA Sequencing: Dr. M. Bentto Soares, University of Iowa

Clone distribution: Researchers may obtain clones from Research

Genetics (www.resgen.com).

The following repetitive elements were found in this cDNA

sequence: 1-28, >AT-rich#Low_complexity (matched compliment)

Seq primer: M13 Forward

POLY(A)+

Location/Qualifiers

i . 312

/organism="Homo sapiens"

/db_xref="taxon:9606"
/clone="UI-E-EJ0-aip-a-08-0-UI"

/tissue_type="fetal eyes, lens, eye anterior segment,
optic nerve, retina, Retina Foveal and Macular, RPE and
Choroid"

/dev_stage="fetal and adult"

/lab_host="DH10B (Life Technologies) (T1 phage resistant)"

/note="Organ: eye; Vector: pT73-Pac (Pharmacia) with a
modified polylinker; Site_1: EcoR I; Site_2: Not I;

UI-E-EJ0 is a subtracted cDNA library constructed

according to Bonaldo, Lennon and Soares, Genome Research, 6-791-806, 1996. First strand cDNA synthesis was primed with an oligo-dT primer containing a Not I site. Double

stranded cDNA was ligated to an EcoR I adaptor, digested with Not I, and cloned directionally into pT73-Pac

vector. The oligonucleotide used to prime the synthesis of

first-strand cDNA contains a library tag sequence that is

located between the Not I site and the (dr18 tail. The

sequence tags for this library are: fetal eyes, AGATAAGA

; lens, CGATAGCA; eye anterior segment, ATGGCCAT;

optic nerve, CCATTAAGTC; Retina, CCGCG; Retina Foveal and

Macular, GICC; RPE and Choroid, ACCTA. This library was

created for the program Gene Discovery in the Visual

System, supported by National Eye Institute (NEI)."

BASE COUNT

ORIGIN

Query Match 100.0%; Score 263; DB 14; Length 312;
Best Local Similarity 100.0%; Pred. No. 4.5e-61;
Matches 263; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT

4 BM684449

LOCUS 312 bp mRNA linear EST 27-FEB-2002

DEFINITION UI-E-EJ0-aip-a-08-0-UI.s1 UI-E-EJ0 Homo sapiens cDNA clone

ACCESSION UI-E-EJ0-aip-a-08-0-UI 3', mRNA sequence.

VERSION BM684449.1 GI:18994345

KEYWORDS human.

SOURCE Homo sapiens

ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrini; Hominidae; Homo.

QY	241	TAAAGAAGCTCTTACCCAGCAT	263	Db	121	TCTCAACTCTCCCTCAGTGGTCACTGATTCAGGGAA	180
Db	259	TTAACAGCTCTACCCAGCAT	281	QY	181	CAAGGGGTCACTATAAGGCCAGGAATCTACTACCTTTCACATTCAACAGGGAA	240
QY	241	TAAACACGCTCTACCCAGCAT	263	Db	181	CAAGGGGTCACTATAAGGCCAGGAATCTACTACCTTTCACATTCAACAGGGAA	240
Db	241	TAAACACGCTCTACCCAGCAT	263	QY	241	TAAACACGCTCTACCCAGCAT	263
RESULT	5			Db	241	TAAACACGCTCTACCCAGCAT	263
LOCUS	Z39512			RESULT	6		
DEFINITION	HSCBH062 normalized infant brain cDNA Homo sapiens	348 bp	mRNA linear EST	DEFINITION	N63086	352 bp	mRNA linear EST
ACCESSION	Z39512	c-1bh06	3', mRNA sequence.	ACCESSION	N63086	30-JAN-1997	30-JAN-1997
VERSION	Z39512.1	GI:562704		VERSION	N63086		
KEYWORDS	EST.			KEYWORDS	EST.		
SOURCE	human.			SOURCE	human.		
ORGANISM	Homo sapiens			ORGANISM	Homo sapiens		
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.				Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.			
Auffray,C., Behar,G., Bois,F., Boucher,C., da Silva,C., Devignes,M.D., Duprat,S., Houleau,R., Jumeau,M.N., Lamy,B., Lorenzo,F., Mitchell,H., Marige-Sanson,R., Pietu,G., Pouliot,Y., Sebastian-Karaktsis,C. and Tesser,A.				AUFFRAY,C., BEHAR,G., BOIS,F., BOUCHER,C., DA SILVA,C., DEVIGNES,M.D., DUPRAT,S., HOULEAU,R., JUMEAU,M.N., LAMY,B., LORENZO,F., MITCHELL,H., MARIGE-SANSON,R., PIETU,G., POULIOT,Y., SEBASTIAN-KARAKTSIS,C. AND TESSER,A.			
IMAGE: molecular integration of the analysis of the human genome and its expression				IMAGE: molecular integration of the analysis of the human genome and its expression			
JOURNAL	C. R. Acad. Sci. III, Sci. Vie 318 (2), 263-272 (1995)			JOURNAL	C. R. Acad. Sci. III, Sci. Vie 318 (2), 263-272 (1995)		
MEDLINE	9527534			MEDLINE	9527534		
COMMENT	Contact: Genethon			COMMENT			
FEATURES	Genexpress-Genethon			FEATURES			
source	Genethon Centre de recherche sur le Genome Human			source			
	1, rue de l'Internationale, BP60 91002 EVRY Cedex, FRANCE						
	Tel: 3316947800						
	Fax: 33160778698						
	Email: genexpress@genethon.fr						
	Single read. 25 T removed at sequence 5' end						
	Genexpress_library_idt: C; Genexpress_sequence_idt: alc-lbh06						
	Seq primer: (-21)M13-universal.						
	Location/Qualifiers						
	1. .348						
	/organism="Homo sapiens"						
	/db_xref="taxon: 9606"						
	/clone="c-1bh06"						
	/clone_lib="normalized infant brain cDNA"						
	/sex="Female"						
	/tissue_type="total brain"						
	/dev_stage="3 months old"						
	/note="Organ: brain; Vector: lafmid BA; Site:1: HindIII; Site:2: NotI; sex=Female; dev_stage=3 months old; isolate=muscular atrophy patient; tissue_type=total brain ; total mRNA was oligo(dT) primed and directionally cloned 5' -> 3' into the HindIII -> NotI sites of the lafmid BA vector. Clone library from B.Soares, Psychiatry Dept. Columbia University, USA. Normalization_method: Bento Soares, P.N.A.S in press"						
	BASE COUNT	109	a				
	ORIGIN	91	c				
		54	g				
		93	t				
		1	others				
Query Match	100.0%	Score	263;	DB	14;	Length	348;
Best Local Similarity	100.0%	Pred.	No. 4.	6e-61;			
Matches	263;	Conservative	0;	Mismatches	0;	Gaps	0;
QY	1	AAACATTAACAGAAATTATAGCTATATAACAAAAGTCCAGGGTAGGCCATC	60	Db	112	TCTCAACTCTCCCTCAGTGGTCACTGATTCAGGGAA	180
Db	1	AAACATTAACAGAAATTATAGCTATATAACAAAAGTCCAGGGTAGGCCATC	60	QY	181	CAAGGGGTCACTATAAGGCCAGGAATCTACTACCTTTCACATTCAACAGGGAA	240
QY	61	TCAAGGAGGCTGATCTGACTTACAACATTCTCCAGGACTGATCTCTCTCGCC	120	Db	121	TCTCAACTCTCCCTCAGTGGTCACTGATTCAGGGAA	180
Db	61	TCAAGGAGGCTGATCTGACTTACAACATTCTCCAGGACTGATCTCTCTCGCC	120	QY	241	TAAAGAAGCTCTTACCCAGCAT	263
QY	121	TCTCAACTCTCCCTCAGTGGTCACTGATTCAGGGAA	180	Db	259	TTAACAGCTCTACCCAGCAT	281

		BASE COUNT	121 a	102 c	68 g	106 t
QY	1 AACATAAACAGAAATTAGCTCATACAAAAGTCCGAGGTAAGGCCAATC	60				
Db	1 AACATAAACAGAAATTAGCTCATACAAAAGTCCGAGGTAAGGCCAATC	60				
QY	61 TCAAGCAAGCTTCATCCTACTTAACAAATTGAGACTGATCTCTTGCC	120				
Db	61 TCAAGCAAGCTTGATCTGACTAACATTGACCAAGGAGCTGAAGGCCAATC	60				
QY	121 TCTCACTCCCTCAGTGTGACGTTACGGTCACTGGTCATGATCCAAAGGGC	180				
Db	121 TCTCACTCCCTCAGTGTGACGTTACGGTCACTGGTCATGATCCAAAGGGC	180				
QY	181 CAAGGGGTGATCACAAAGCCAGGAATACACTACCTTTTACATCACAGGGAA	240				
Db	181 CAAGGGGTGATCACAAAGCCAGGAATACACTACCTTTTACATCACAGGGAA	240				
QY	241 TTAAACACGCTTACCCACCAT	263				
Db	241 TTAAACACGCTTACCCACCAT	263				
RESULT 7						
AI095108	AI095108	397 bp	mRNA	linear	EST	01-OCT-1998
LOCUS	gpi4h11.x1 NCI_CGAP_Brn23	Homo sapiens	cDNA clone	IMAGE:1686789	3',	
DEFINITION						
ACCESSION	AI095108					
VERSION	AI095108.1					
KEYWORDS	EST.					
SOURCE						
REFERENCE	1 (bases 1 to 397)					
AUTHORS	NCI/NINDS-CGAP					
TITLE	National Cancer Institute / National Institute of Neurological Disorders and Stroke, Brain Tumor Genome Anatomy Project (CGAP/BIGAP), Tumor Gene Index					
JOURNAL	Unpublished (1998)					
COMMENT	Contact: Robert Strausberg, Ph.D. Email: cgaps-re@mail.nih.gov					
Tissue Procurement:	David N. Louis, M.D., Myrna R. Rosenfeld M.D., Ph.D.					
CDNA Library Preparation:	M. Bento Soares, Ph.D., M. Fatima Bonaldo, Ph.D.					
CDNA Library Arrayed by:	Greg Lennon, Ph.D.					
CDNA Sequencing by:	Washington University Genome Sequencing Center					
Clone distribution:	NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at: www-bio.llnl.gov/bigrp/image/image.html					
Insert length:	724 Std Error: 0.00					
Seq primer:	-40m13 fwd. ER from Amersham					
High quality sequence stop:	396.					
FEATURES						
SOURCE	1. .397 Location/Qualifiers					
/organism="Homo sapiens"						
/clone="IMAG:1686789"						
/db_xref="taxon:9606"						
/clone_1_ib="NCI_CGAP_Brn23"						
/tissue_type="glioblastoma (pooled)"						
/lab_host="DH10B"						
/note="Organ: brain; Vector: pRT3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; 1st						
strand CDNA was primed with a Not I - oligo(dT) primer [5'-TGTGACCATCTGAGTGGACGCCATACGTTTTTTTTTTTTTTTTT T 3']; double-stranded CDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pRT3 vector. Library is normalized and was constructed by Bento Soares and M.Fatima Bonaldo."						
FEATURES						
SOURCE	1. .440 Location/Qualifiers					
/organism="Homo sapiens"						
/db_xref="taxon:9606"						
/clone="IMAG:166566"						
/clone_1_ib="NCI_CGAP_Brn23"						
/tissue_type="glioblastoma (pooled)"						
/lab_host="DH10B"						
/note="Organ: brain; Vector: pRT3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; 1st strand CDNA was primed with a Not I - oligo(dT) primer [5'-TGTGACCATCTGAGTGGACGCCATACGTTTTTTTTTTTTTTT T 3']; double-stranded CDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pRT3 vector.						

T 3']; double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pR73 vector. Library is normalized, and was constructed by Bento Soares and M.Fatima Bonaldo."

BASE COUNT
ORIGIN
145 a 111 C 94 g 120 t

Query Match 100.0%; Score 263; DB 9; Length 470;
Best Local Similarity 100.0%; Pred. No. 4.9e-61; Mismatches 0; Indels 0; Gaps 0;
Matches 263; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 AACATAAAGAGAATTATAGCTATACAAAAAAGTCCGAGGAAGGCCATC 60
1 AACATAAAGAGAATTATAGCTATACAAAAAAGTCCGAGGAAGGCCATC 60
61 TCAAGCAAGGCTTGATCTGACTAACATTTACCAAGGACTGTAGTCCTGC 120
61 TCAAGCAAGGCTTGATCTGACTAACATTTACCAAGGACTGTAGTCCTGC 120
QY 121 TCTCACTCTCCCTCAGTGTGTCAGCTCACGGATCTGGCATGCC 180
121 TCTCACTCTCCCTCAGTGTGTCAGCTCACGGATCTGGCATGCC 180
Db 181 CAAGGGGTCTCATCAAAGGCCAGGA 240
181 CAAGGGGTCTCATCAAAGGCCAGGA 240
QY 241 TTAAACACGCTCTACCCACAT 263
241 TTAAACACGCTCTACCCACAT 263

Db

RESULT 11

AT421276 LOCUS AT421276 DEFINITION mRNA sequence: tfl9905.x1 NCI_CGAP_Brn23 Homo sapiens cDNA clone IMAGE:2096696 3', mRNA sequence.

ACCESSION AT421276
VERSION AT421276.1 GI:4267207
KEYWORDS EST
SOURCE

ORGANISM

Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrini; Hominidae; Homo. human.

REFERENCE NCI/NINDS-CGAP http://www.ncbi.nlm.nih.gov/ncigap/

AUTHORS Title: National Cancer Institute / National Institute of Neurological Disorders and Stroke, Brain Tumor Genome Anatomy Project
Contact: Robert Strausberg, Ph.D.
Email: cgabs-r@mail.nih.gov

JOURNAL Tissue Procurement: David N. Louis, M.D., Myrna R. Rosenfeld M.D., Ph.D.
CDNA Library Preparation: M. Bento Soares, Ph.D., M. Fatima Bonaldo, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.
DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: NCI-GAP clone distribution information can be found through the I.M.A.G.E. Consortium/LN1 at: www-bio.llnl.gov/bdrp/image/image.html

Insert length: 745 Std Error: 0.00
Seq primer: -40UP from Gibco
High quality sequence stop: 451.

FEATURES
Source
Location/Qualifiers
1. .481
/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:2096696"
/clone.lib="NCI_CGAP_Brn23"
/tissue.type="glialblastoma (pooled)"
/lab_host="DNI0"

/note="Organ: brain; Vector: pR73D-pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; 1st strand cDNA was primed with a Not I - oligo(dT) primer [5'-TGTGACCATCGTACGGGAGGGCCATACCTTTTTTTTTTTTTTTT
T 3']; double stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pR73 vector. Library is normalized, and was constructed by Bento Soares and M.Fatima Bonaldo."

BASE COUNT
ORIGIN
149 a 114 C 96 g 122 t

Query Match 100.0%; Score 263; DB 9; Length 481;
Best Local Similarity 100.0%; Pred. No. 5e-61; Mismatches 0; Indels 0; Gaps 0;
Matches 263; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 AACATAAAGAGAATTATAGCTATACAAAAAAGTCCGAGGAAGGCCATC 60
1 AACATAAAGAGAATTATAGCTATACAAAAAAGTCCGAGGAAGGCCATC 60
61 TCAAGCAAGGCTTGATCTGACTAACATTTACCAAGGACTGTAGTCCTGC 120
61 TCAAGCAAGGCTTGATCTGACTAACATTTACCAAGGACTGTAGTCCTGC 120
QY 121 TCTCACTCTCCCTCAGTGTGTCAGCTCACGGATCTGGCATGCC 180
121 TCTCACTCTCCCTCAGTGTGTCAGCTCACGGATCTGGCATGCC 180
Db 181 CAAGGGGTCTCATCAAAGGCCAGGA 240
181 CAAGGGGTCTCATCAAAGGCCAGGA 240
QY 241 TTAAACACGCTCTACCCACAT 263
241 TTAAACACGCTCTACCCACAT 263

Db

RESULT 12

AW008726 LOCUS AW008726 DEFINITION mRNA sequence: w572c12.x1 NCI_CGAP_Brn23 Homo sapiens cDNA clone IMAGE:2502742 3', mRNA sequence.

ACCESSION AW008726
VERSION AW008726.1 GI:50557504
KEYWORDS EST
SOURCE

ORGANISM

Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrini; Hominidae; Homo. human.

REFERENCE NCI/NINDS-CGAP http://www.ncbi.nlm.nih.gov/ncigap/

AUTHORS Title: National Cancer Institute / National Institute of Neurological Disorders and Stroke, Brain Tumor Genome Anatomy Project (CGAP/BIGAP), tumor Gene Index
Contact: Robert Strausberg, Ph.D.
Email: cgabs-r@mail.nih.gov

JOURNAL Unpublished (1998)
CDNA Library Preparation: David N. Louis, M.D., Myrna R. Rosenfeld M.D., Ph.D.
CDNA Library Arrayed by: Greg Lennon, Ph.D.

DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LN1 at: www-bio.llnl.gov/bdrp/image/image.html

Insert length: 679 Std Error: 0.00
Seq primer: -40UP from Gibco
High quality sequence stop: 465.

FEATURES
Source
Location/Qualifiers
1. .491
/organism="Homo sapiens"
/db_xref="taxon:9606"

Page 9

ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eucelostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 522)
 AUTHORS Ronald, M.F., Lennon, G. and Soares, M.B.
 TITLE Normalization and subtraction: two approaches to facilitate gene
 discovery
 JOURNAL Genome Res. 6 (9), 791-806 (1996)
 MEDLINE 9704477
 COMMENT Contact: Soares, MB
 Program for Rat Gene Discovery and Mapping
 University of Iowa
 451 Eckstein Medical Research Building Iowa City, IA 52242, USA
 tel: 319 335 8250
 fax: 319 335 9545
 email: mssoares@blue.weed.uiowa.edu
 Tissue procurement: Dr. Gregg Hageman
 cDNA Library preparation: Dr. M. Bento Soares, University of Iowa
 cDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
 DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
 Clone distribution: Researchers may obtain clones from Research
 Genetics (www.resgen.com).
 The following REPEAT elements were found in this cDNA
 sequence: 1-28 >AT>rich</Low complexity (matched complement)
 Seq primer: M13 Forward
 POLYA=Yes
 FEATURES Source
 /location/qualifiers
 1..522
 /organism="Homo sapiens"
 /db_xref="taxon:9605"
 /clone="UI-E-F-0-ahf-b-11-0-UI"
 /clone_id="UI-E-F-0-ahf-b-11-0-UI-0"
 /tissue_type="fetal eyes, lens, eye anterior segment,
 optic nerve, retina, Retina Foveal and Macular, RPE and
 Choroid."
 /dev_stage="fetal and adult"
 /lab_host="DH10B (Life Technologies) (T1 phage resistant)"
 /noter="PCR: eye; vector: pPR3-Pac (Pharmacia) with a
 modified polylinker; site 1: EcoR I; site 2: Not I;
 UI-E-F-0 is a subtracted cDNA library constructed
 according to Ronald, Lennon and Soares, Genome Research,
 6:797-806, 1996. First strand cDNA synthesis was primed
 with an oligo-dT primer containing a Not I site. Double
 stranded cDNA was ligated to an EcoR I adaptor, digested
 with Not I and cloned directionally into pPR3-Pac
 vector. The oligonucleotide used to prime the synthesis of
 first-strand cDNA contains a library tag sequence that is
 located between the Not I site and the (dT)18 tail. The
 sequence tags for this library are: fetal eyes, AGATCAGA
 ; lens, CGATTAGGA; eye anterior segment, AATGCCGAT;
 optic nerve, CCCTAACG; retina, CGCGC; Retina Foveal and
 Macular, GTCC; RPE and Choroid, ACCTA. This library was
 created for the program, Gene Discovery in the Visual
 System, supported by National Eye Institute (NEI).
 TAG_LIB=UI-E-F-0
 TAG_TISSUE=human retina
 TAG_SEQ=CGCGC
 BASE COUNT
 ORIGIN
 Query Match 100.0%; Score 263; DB 14; Length 522;
 Best Local Similarity 100.0%; Pred. No. 5.1e-61;
 Matches 263; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 AAACATTAACAGAAATTATAGCTCATATAACAAAAAAGTCAGGTAAGGCCATC 60
 19 AAACATTAACAGAAATTATAGCTCATATAACAAAAAAGTCAGGTAAGGCCATC 78
 DB 61 TCAGCAAGGCTGTACTGACTAACATTCACAGACTGATCTCTTCGCC 120
 79 TCAGCAAGGCTGTACTGACTAACATTCACAGACTGATCTCTTCGCC 138
 DQ 121 TCACACTCCCTACTGGTCTCACGTTACGGTATCTCTGTCTGATGCCAGGCC 180

Db
139 TCTCAACCTTCCCTTCAGGGTGTCAGCTGATCTGGTCATGATCCAAAGGCC 198
QY
181 CAAGGTGGTCATCAAGACCCAGGAATTACTACTACCTTTCACATTCAACAGGGAA 240
Db
199 CAAGGTGGTCATCAAGACCCAGGAATTACTACTACCTTTCACATTCAACAGGGAA 258
QY
241 TTAACACCTTCACTTACGAT 263
Db
259 TTAACACCTTACCCAGCAT 281

Search completed: June 21, 2003, 03:37:16
Job time : 788.499 secs

PCR Profile:

Initial incubation: 95 degrees C for 10 minutes

Denaturation: 94 degrees C for 30 seconds

Annealing: 60 degrees C for 30 seconds

Polymerization: 72 degrees C for 23 seconds

PCR Cycles: 30

Thermal Cycler: Perkin Elmer 9700

Protocol:

Template: 25 ng each 1 μM

Primer: 10 mM each 200 μM

dNTPs: AmpliTaq Gold Polymerase: 0.07 units/μl

Total Vol.: 5 μl

Buffer: MgCl₂: 2.5 mM
KCl: 50 mM
Tris-HCl: 10 mM
pH: 8.3Prepared with primer pairs derived from AA004887 -- Unigene.
FEATURES
sourceQuery Match 1. .451
Best Local Similarity 100.0%; Pred. 0. 1.5e-89;
Matches 451; Conservative 0; Mismatches 0; Indels 0; Gaps 0;Qy 1 GCAGAAGCTCCACTTNTATTTCAGTTGACTCATGTGCCACTGTCAAATGGTC 60
Db 1 GGAGGAGCTCCACTTNTATTTCAGTTGACTCATGTGCCACTGTCAAATGGTC 60Qy 61 ACGGCTCACTCAATTCTGAGGGCTGGCAAGNAAGAGAAAGATGCCAGAGTC 120
Db 61 ACAGCTCACTCAATTCTGAGGGCTGGCAAGNAAGAGAAAGATGCCAGAGTC 120Qy 121 TGTAGACTGCATCTCGACATATACTTACGCTTGAGAATCACTGTCAAGGGT 180
Db 121 TGTAGACTGCATCTCGACATATACTTACGCTTGAGAATCACTGTCAAGGGT 180Qy 181 TATTAAATGAGATTGTGAGATAATTTCAGCTAATTTTAACTAT 240
Db 181 TATTAAATGAGATTGTGAGATAATTTCAGCTAATTTTAACTAT 240Qy 241 GCAGGATGTTAGAGATTGCCAATTAGAGCTTACGGATGGAATAATTGG 300
Db 241 GCAGGATGTTAGAGATTGCCAATTAGAGCTTACGGATGGAATAATTGG 300Qy 301 CCTCTCTGTCACAGCTCTCGTTATAAGGGTAAGAAAGTTCTTCAGAAAT 360
Db 301 CCTCTCTGTCACAGCTCTCGTTATAAGGGTAAGAAAGTTCTTCAGAAAT 360Qy 361 ACAGCAGAAATCCTGATGTTCTGATAGGATTAATTGGAGATGTCGCTG 420
Db 361 ACAGCAGAAATCCTGATGTTCTGATAGGATTAATTGGAGATGTCGCTG 420Qy 421 GCTCTGTTGAGATGGAGACCAACAAATGCTGT 451
Db 421 GCTCTGTTGAGATGGAGACCAACAAATGCTGT 451

RESULT 2 f - SEQ ID NO: 164

G2509 LOCUS G42509 451 bp DNA linear STS 24-DBC-1998

DEFINITION SHGC-5859 Human Homo sapiens STS genomic, sequence tagged site.

ACCESSION G42509 VERSION G42509.1 GI:4062074

KEYWORDS STS.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Butheria; Primates; Catarhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 451) Myers,R.M. Human STS (1998)

AUTHORS JOURNAL Unpublished (1998)

COMMENT Contact: Richard M. Myers

Stanford University School of Medicine

Department of Genetics, M-344, Stanford, CA 94305, USA

Tel: 4157259887 Fax: 4157259889

Email: myers@shgc.stanford.edu

Primer A: GCAATGCGTCACACGCTC

Primer B: GGCAATTATTTCATCGCT

STS size: 254

ALIGNMENTS

for SEQ ID NO: 164

RESULT 1
ABL67130
ID ABL67130 standard; DNA; 451 BP.
XX
AC ABL67130;
XX
DT 15-MAY-2002 (first entry)
XX
DE Thyroid cancer related gene sequence SEQ ID NO:5467.
XX
KW Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
KW stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
KW cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
KW gene; ds.
XX
OS Homo sapiens.
XX
PN WO200194629-A2.
XX
PD 13-DEC-2001.
XX
PF 30-MAY-2001; 2001WO-US10838.
XX
PR 05-JUN-2000; 2000US-209473P.
PR 05-JUN-2000; 2000US-209531P.
PR 18-SEP-2000; 2000US-233133P.
PR 18-SEP-2000; 2000US-233617P.
PR 20-SEP-2000; 2000US-234009P.
PR 20-SEP-2000; 2000US-234034P.
PR 20-SEP-2000; 2000US-234052P.
PR 22-SEP-2000; 2000US-234509P.
PR 22-SEP-2000; 2000US-234567P.

SET 1 D NO: 64 - cont -

PR 25-SEP-2000; 2000US-234928P. Db 1 GCAGAGGCCCTCACCTTTATTCACTGTTACTAATCTGTCCCCACTGTGCAAAATGGAGTC 60
 PR 25-SEP-2000; 2000US-234928P. Qy 61 ACACGGCTCACTCAATCTGAGGACTGCGAAGNAAAGAGAAAGATGCCAGAGCAGTC 120
 PR 25-SEP-2000; 2000US-235083P. Db 61 ACACGGCTCACTCAATCTGAGGACTGCGAAGNAAAGAGAAAGATGCCAGAGCAGTC 120
 PR 26-SEP-2000; 2000US-235637P. Qy 121 TGTAGAGTGCATCTCAGACTATCTTAGAGCTTGAGAAATCTGAGTCACTGTGAGGTT 180
 PR 27-SEP-2000; 2000US-235711P. Db 121 TGTAGAGTGCATCTCAGACTATCTGAGTCACTGTGAGAATCTGAGGTT 180
 PR 27-SEP-2000; 2000US-235840P. Qy 181 TATTTAAATGCAATTGAGATAATTAGACTAATTTTTAATTAACAT 240
 PR 28-SEP-2000; 2000US-236028P. Db 181 TATTTAAATGCAATTGAGATAATTAGACTAATTTTTAATTAACAT 240
 PR 28-SEP-2000; 2000US-236033P. Qy 241 GCAGAGTATTATTTAGAGATTTGCCAATTAGACTTCACTGTTAGGATGGAATAATTGG 300
 PR 28-SEP-2000; 2000US-236109P. Db 241 GCAGAGTATTATTTAGAGATTTGCCAATTAGACTTCACTGTTAGGATGGAATAATTGG 300
 PR 29-SEP-2000; 2000US-236842P. Qy 301 CCTCTCTGTCACAGTCTCTGTTATAAGTGGTAAGAAAGTTCTCTCCAGAAAT 360
 PR 02-OCT-2000; 2000US-237172P. Db 301 CCTCTCTGTCACAGTCTCTGTTATAAGTGGTAAGAAAGTTCTCTCCAGAAAT 360
 PR 02-OCT-2000; 2000US-237173P. Qy 361 ACACGAGAAATCCGATGTTCTGAGTAGGAGTATCTGGAGTTCAGGATGGAATAATTGG 300
 PR 02-OCT-2000; 2000US-237278P. Db 361 ACACGAGAAATCCGATGTTCTGAGTAGGAGTATCTGGAGTTCAGGATGGAATAATTGG 300
 PR 02-OCT-2000; 2000US-237294P. Qy 361 ACACGAGAAATCCGATGTTCTGAGTAGGAGTATCTGGAGTTCAGGATGGAATAATTGG 300
 PR 02-OCT-2000; 2000US-237295P. Db 361 ACACGAGAAATCCGATGTTCTGAGTAGGAGTATCTGGAGTTCAGGATGGAATAATTGG 300
 PR 02-OCT-2000; 2000US-237316P. Qy 361 ACACGAGAAATCCGATGTTCTGAGTAGGAGTATCTGGAGTTCAGGATGGAATAATTGG 300
 PR 03-OCT-2000; 2000US-237425P. Db 361 ACACGAGAAATCCGATGTTCTGAGTAGGAGTATCTGGAGTTCAGGATGGAATAATTGG 300
 PR 03-OCT-2000; 2000US-237598P. Qy 421 GCTCGTGGATGGTGAACACAAATGCTGT 451
 PR 03-OCT-2000; 2000US-237604P. Db 421 GCTCGTGGATGGTGAACACAAATGCTGT 451
 PR 03-OCT-2000; 2000US-237608P. Qy 421 GCTCGTGGATGGTGAACACAAATGCTGT 451
 PR 01-NOV-2000; 2000US-244867P. Db 421 GCTCGTGGATGGTGAACACAAATGCTGT 451
 PR 01-NOV-2000; 2000US-245084P. Qy 421 GCTCGTGGATGGTGAACACAAATGCTGT 451
 PA (AVAL-) AVALON PHARM.

PR 25-SEP-2000; 2000US-234928P.

PR 25-SEP-2000; 2000US-235083P.

PR 26-SEP-2000; 2000US-235637P.

PR 27-SEP-2000; 2000US-235711P.

PR 27-SEP-2000; 2000US-235720P.

PR 27-SEP-2000; 2000US-235840P.

PR 28-SEP-2000; 2000US-236028P.

PR 28-SEP-2000; 2000US-236033P.

PR 28-SEP-2000; 2000US-236109P.

PR 29-SEP-2000; 2000US-236842P.

PR 02-OCT-2000; 2000US-237172P.

PR 02-OCT-2000; 2000US-237173P.

PR 02-OCT-2000; 2000US-237278P.

PR 02-OCT-2000; 2000US-237294P.

PR 02-OCT-2000; 2000US-237295P.

PR 03-OCT-2000; 2000US-237316P.

PR 03-OCT-2000; 2000US-237425P.

PR 03-OCT-2000; 2000US-237598P.

PR 03-OCT-2000; 2000US-237604P.

PR 03-OCT-2000; 2000US-237608P.

PR 01-NOV-2000; 2000US-244867P.

PR 01-NOV-2000; 2000US-245084P.

PA (AVAL-) AVALON PHARM.

PR 25-SEP-2000; 2000US-234928P.

PT Young PE, Augustus M, Carter KC, Perner R, Endress G, Horrigan S;

PT Soppet DR, Weaver Z;

XX DR;

XX WPI; 2002-188264/24.

PT Screening for anti-neoplastic agent involves exposing cells to a

PT chemical agent to be tested for anti-neoplastic activity, and

PT determining a change in expression of a gene of a signature gene set -

PS Claim 1; SEQ ID 5467; 44pp; English.

XX

PT Screening for anti-neoplastic agent involves exposing cells to a

PT chemical agent to be tested for anti-neoplastic activity, and

PT determining a change in expression of a gene of a signature gene set -

PS

CC The present invention describes a method (M1) for screening for an

CC anti-neoplastic agent. The method involves exposing cells to a chemical

CC expression of at least one gene (1) of a signature gene set, where (1)

CC comprises a sequence (S) selected from 8447 sequences (given in ABL61664

CC to ABL70110), or is at least 95% identical to (S), where a change in

CC expression is indicative of anti-neoplastic activity. (1) has cytosatic

CC activity and can be used in gene therapy. M1 can be used for screening

CC an anti-neoplastic agent, and can be used for producing a product which

CC is the data collected with respect to the anti-neoplastic agent as a

CC result of M1, and the data is sufficient to convey the chemical

CC structure and/or properties of the agent. M1 can be used in the

CC treatment of cancer such as colon, breast, stomach, lung, thyroid,

CC oesophageal, ovarian, kidney, prostate or pancreatic cancer,

CC adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer,

CC carcinoma, papillary carcinoma and Wilm's tumour.

SQ Sequence 451 BP; 134 A; 77 C; 97 G; 142 T; 1 other;

Query Match 99.8%; Score 450; DB 24; Length 451;

Best local Similarity 100.0%; Pred. No. 1.9e-107;

Matches 451; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED

Mon Jun 23 10:00:35 2003

us-09-964-8

RESULT	1	SEARCHED	10	SEARCHED	164
ACCESSION	AA004887	LOCUS	451 bp	mRNA	linear
DEFINITION				EST	23-JUL-1996
VERSION	AA004887	clone IMAGE:428592	3	IMAGE	mRNA sequence.
SOURCE	BEST	ORGANISM	human.	Homo sapiens	
REFERENCE		AUTHORS	I (bases 1 to 451)	Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.	
JOURNAL			Hillier, L., Clark, N., Dubuque, T., Elliston, K., Hawkins, M., Holman, M., Hultman, M., Kucaba, T., Le, M., Lennon, G., Marra, M., Parsons, J., Raskin, L., Rohlfing, T., Soares, M., Tan, F., Trevaskis, E., Waterston, R., Williamson, A., Wohldmann, P., and Wilson, R.		
COMMENT		TITLE	The WashU-Merck EST Project		
		Unpublished (1995)	Contact: Wilson RK		
		Washington University School of Medicine	4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108		
		Tel:	314 286 1800		
		Fax:	314 286 1810		
		Email:	est@watson.wustl.edu	This clone is available royalty-free through INFLN ; contact the IMAGE Consortium (info@image.lnl.gov) for further information.	
		Seq primer:	mob.RBGA+ET	Seq primer: mob.RBGA+ET	
		High quality sequence stop:	429.	High quality sequence stop: 429.	
FEATURES	source	FEATURES	Location/Qualifiers		
			1 .. 451		
			/organism="Homo sapiens"		
			/db_xref="taxon:9606"		
			/db_xref="GDB:1398361"		
			/clone_lib="Soares_fetal_liver_spleen_INFIS_S1"		
			/sex="male"	/dev_stage="20 week-post conception fetus"	
			/lab_host="DH10B (ampicillin resistant)"		
			/note="Organ: Liver and Spleen; Vector: PTIT3D (Pharmacia)		
			with a modified polylinker; Site_1: Pac I; Site_2: Eco RI;		
			This is a subtracted version of the original Soares fetal liver spleen INFIS library. 1st strand cDNA was primed		
			with a Pac I - Oligo(dT) primer [5'-ACTGGAGAATTAAATTAAGATCTTTTTTTTTTTT 3'],		
			double-stranded cDNA was ligated to Eco RI adaptors		
			(Pharmacia), digested with Pac I and cloned into the Pac I		
			and Eco RI sites of the modified pPT3 vector. Library		
			went through one round of normalization. Library		
			constructed by Bento Soares and M.Fatima Bonaldo."		
BASE COUNT	134 a 77 c 97 g 142 t	BASE COUNT	134 a 77 c 97 g 142 t	ORIGIN	1 others
ORIGIN		Query Match	99.8%	Score	450;
		Best Local Similarity	100.0%	DB	9;
		Matches	451;	Length	451;
		Conservative	0;	Pred.	No. 7.1e-108;
		Mismatches	0;	Indels	0;
		Matches	451;	Gaps	0;
OY	1	GCAGAGGCCCTCACTTATTATCGTGTACTCATCGTCCACTGTCAAATGGAGTC	60		
Db	1	GCAGAGGCCCTCACTTATTATCGTGTACTCATCGTCCACTGTCAAATGGAGTC	60		
OY	61	ACACGGCTCACTCAATTCTGAGAGGCTGGAGAGAAAGATGCCAGAGCAGTC	120		
Db	61	ACACGGCTCACTCAATTCTGAGAGGCTGGAGAGAAAGATGCCAGAGCAGTC	120		
OY	121	TCTTAGGTTCGATTCAGACTAATACCTTACACTCTGGAAATCACGTGAGGTT	180		
Db	121	TCTTAGGTTCGATTCAGACTAATACCTTACACTCTGGAAATCACGTGAGGTT	180		
OY	181	TATTTAACATGAGATTGTGAGGAAATTACACTAATTTTTATAAATT	240		
Db	181	TATTTAACATGAGATTGTGAGGAAATTACACTAATTTTTATAAATT	240		
OY	241	GCAGGATGTTATTAGAGATTGCAAAATTAGAATCTTCAGCGAGGAAATTGG	300		
Db	241	GCAGGATGTTATTAGAGATTGCAAAATTAGAATCTTCAGCGAGGAAATTGG	300		
OY	301	CCTCTTGTCACAGCTCTGTTATAGGGTAAGAAGTTCTTCAGAATAAT	360		
Db	301	CCTCTTGTCACAGCTCTGTTATAGGGTAAGAAGTTCTTCAGAATAAT	360		
OY	361	ACACGGAGAAATCCGATGGGTTCTAGAGGTTATGGAGATGGCAGAGACCA	420		
Db	361	ACACGGAGAAATCCGATGGGTTCTAGAGGTTATGGAGATGGCAGAGACCA	420		
OY	421	GCTTGTTGGATGGACACCAACATGTCGT	451		
Db	421	GCTTGTTGGATGGACACCAACATGTCGT	451		

ALIGNMENTS

for SEQ ID NO: 174

RESULT 1
ABL67140
ID ABL67140 standard; DNA; 272 BP.
XX
AC ABL67140;
XX
DT 15-MAY-2002 (first entry)
XX
DE Thyroid cancer related gene sequence SEQ ID NO:5477.
XX
KW Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
KW stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
KW cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
KW gene; ds.
XX
OS Homo sapiens.
XX
PN WO200194629-A2.
XX
PD 13-DEC-2001.
XX
PF 30-MAY-2001; 2001WO-US10838.
XX
PR 05-JUN-2000; 2000US-209473P.
PR 05-JUN-2000; 2000US-209531P.
PR 18-SEP-2000; 2000US-233133P.
PR 18-SEP-2000; 2000US-233617P.
PR 20-SEP-2000; 2000US-234009P.
PR 20-SEP-2000; 2000US-234034P.
PR 20-SEP-2000; 2000US-234052P.
PR 22-SEP-2000; 2000US-234509P.
PR 22-SEP-2000; 2000US-234567P.

for
sister - son - daughter

PR	25-SEP-2000;	2000US-234923P.	Db	1
PR	25-SEP-2000;	2000US-234924P.	QY	61
PR	25-SEP-2000;	2000US-235077P.	Db	61
PR	25-SEP-2000;	2000US-235082P.	ATTTATACACCCTATTCAGTCCTTTAGATCACTCTCTTACTCTCTGG	120
PR	25-SEP-2000;	2000US-235134P.	ATTTATACACCCTATTCAGTCCTTTAGATCACTCTCTTACTCTCTGG	120
PR	25-SEP-2000;	2000US-235280P.	QY	121
PR	26-SEP-2000;	2000US-235637P.	Db	121
PR	26-SEP-2000;	2000US-235638P.	Db	121
PR	27-SEP-2000;	2000US-235711P.	QY	181
PR	27-SEP-2000;	2000US-235720P.	Db	181
PR	27-SEP-2000;	2000US-235840P.	Db	181
PR	27-SEP-2000;	2000US-235863P.	Db	181
PR	28-SEP-2000;	2000US-236028P.	Db	181
PR	28-SEP-2000;	2000US-236032P.	QY	241
PR	28-SEP-2000;	2000US-236033P.	Db	241
PR	28-SEP-2000;	2000US-236034P.	AGGAGGGTGTCTGGGAGAGATGTCGTGTT	272
PR	28-SEP-2000;	2000US-236109P.	AGGAGGGTGTCTGGGAGAGATGTCGTGTT	272
PR	28-SEP-2000;	2000US-236111P.		

29-SEP-2000;	2000US-236849P
02-OCT-2000;	2000US-237172P
02-OCT-2000;	2000US-237173P
02-OCT-2000;	2000US-237294P
02-OCT-2000;	2000US-237295P
02-OCT-2000;	2000US-237316P
03-OCT-2000;	2000US-237425P
03-OCT-2000;	2000US-237598P
03-OCT-2000;	2000US-237604P
03-OCT-2000;	2000US-237606P
01-NOV-2000;	2000US-244867P
01-NOV-2000;	2000US-245084P

Young PE, Augustus M, Carter KC, Ebner R, Endress G, Horrigan S; Soppet DR, Weaver Z;

chemical agent to be tested for anti-neoplastic activity, and determining a change in expression of a gene of a signature gene set

卷之三

anti-neoplastic agent. The method involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, determining a change in expression of at least one gene (I_1) of a signature gene set, where (I_1) comprises a sequence (S) selected from 8447 sequences (given in ABL616449 to ABL7010), or is at least 95% identical to (S), where a change in expression is indicative of anti-neoplastic activity. (I_1) has cytostatic activity and can be used in gene therapy. M_1 can be used for screening an anti-neoplastic agent, and can be used for producing a product which is the data collected with respect to the anti-neoplastic agent as a result of M_1 , and the data is sufficient to convey the chemical structure and/or properties of the agent. M_1 can be used in the treatment of cancer such as colon, breast, stomach, lung, thyroid, oesophageal, ovarian, kidney, prostate or pancreatic cancer, adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal carcinoma, infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine carcinoma, papillary carcinoma and Wilms' tumour.

SQ Sequence 272 BP; 45 A; 57 C; 47 G; 123 T; 0 Other;

Query Match 100.0%; Score 272; DB 24; Length 272;

Mon Jun 23 10:00:36 2003

us-09-964

RESULT 1
 AA81006
 LOCUS
 DEFINITION zs94a06.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:705106 3',
 mRNA sequence.
 VERSION AA281006
 KEYWORDS EST
 SOURCE
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.
 REFERENCE 1 (bases 1 to 272)
 AUTHORS NCI-CGAP <http://www.ncbi.nlm.nih.gov/ncicgap>.
 TITLE National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
 Tumor Gene Index
 Unpublished (1997)
 COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgaps@remail.nih.gov
 This clone is available royalty-free through LILN; contact the
 IMAGE Consortium (<http://www.image.lnl.gov>) for further information.
 Insert Length: 845 Std Error: 0.00
 Seq primer: -41ml3 fwd. ER from Amersham
 High quality sequence stop: 252.

FEATURES source

1 .272
 /organism="Homo sapiens"
 /db_xref="SPB:5054830"
 /db_xref="LUXON:9605"

FEATURES source

BASE COUNT

45 a

57 c

47 g

123 t

ORIGIN

Query Match 100.0%; Score 272; DB 9; Length 272;
 Best Local Similarity 100.0%; Pred. No. 3e-45; 0: Mismatches
 Matches 272; Conservative 0: Indels 0: Gaps 0;

QY 1 TTTTTTTTTAATTAGCTGTCTGTATAGTTTATCCTTATCTTTTGAC 60
 Db 1 TTTCCTTTTAATTAGCTGTCTGTATAGTTTATCCTTATCTTTTGAC 60
 QY 61 ATTTATACACCCATTATCAATGTCCTTTAGTACTCTATCTCTTACTCTCGG 120
 Db 61 ATTTATACACCCATTATCAATGTCCTTTAGTACTCTATCTCTTACTCTCGG 120
 QY 121 GCTTGAATCTCTGTTCTGATCTGCTGCTCTCTGGATACCTGGAGTTT 180
 Db 121 GCTTGAATCTCTGTTCTGATCTGCTGCTCTCTGGATACCTGGAGTTT 180
 QY 181 CCTCTGACCTCTGTCCTCACTAGAAATGATTTCCATGAGAATCCTGGTCCCTGGATG 240
 Db 181 CCTCTGACCTCTGTCCTCACTAGAAATGATTTCCATGAGAATCCTGGTCCCTGGATG 240
 QY 241 AGGAGGGTGTCTGGGGAGATGCCCTT 272
 Db 241 AGGAGGGTGTCTGGGGAGATGCCCTT 272

ALIGNMENTS

for Seq ID ~0:180

RESULT 1
ABL67146
ID ABL67146 standard; DNA; 319 BP.
XX
AC ABL67146;
XX
DT 15-MAY-2002 (first entry)
XX
DE Thyroid cancer related gene sequence SEQ ID NO:5483.
XX
KW Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
KW stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
KW cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
KW gene; ds.
XX
OS Homo sapiens.
XX
PN WO200194629-A2.
XX
PD 13-DEC-2001.
XX
PF 30-MAY-2001; 2001WO-US10838.
XX
PR 05-JUN-2000; 2000US-209473P.
PR 05-JUN-2000; 2000US-209531P.
PR 18-SEP-2000; 2000US-233133P.
PR 18-SEP-2000; 2000US-233617P.
PR 20-SEP-2000; 2000US-234009P.
PR 20-SEP-2000; 2000US-234034P.
PR 20-SEP-2000; 2000US-234052P.
PR 22-SEP-2000; 2000US-234509P.
PR 22-SEP-2000; 2000US-234567P.

PR 25-SEP-2000; 2000US-234923P
 PR 25-SEP-2000; 2000US-234924P
 PR 25-SEP-2000; 2000US-235083P
 PR 25-SEP-2000; 2000US-235144P
 PR 25-SEP-2000; 2000US-235280P
 PR 26-SEP-2000; 2000US-235637P
 PR 26-SEP-2000; 2000US-235638P
 PR 27-SEP-2000; 2000US-235711P
 PR 27-SEP-2000; 2000US-235720P
 PR 27-SEP-2000; 2000US-235840P
 PR 27-SEP-2000; 2000US-235863P
 PR 28-SEP-2000; 2000US-236028P
 PR 28-SEP-2000; 2000US-236032P
 PR 28-SEP-2000; 2000US-236033P
 PR 28-SEP-2000; 2000US-236034P
 PR 28-SEP-2000; 2000US-236109P
 PR 28-SEP-2000; 2000US-236111P
 PR 29-SEP-2000; 2000US-236422P
 PR 29-SEP-2000; 2000US-236891P
 PR 02-OCT-2000; 2000US-237122P
 PR 02-OCT-2000; 2000US-237173P
 PR 02-OCT-2000; 2000US-237288P
 PR 02-OCT-2000; 2000US-237294P
 PR 02-OCT-2000; 2000US-237295P
 PR 02-OCT-2000; 2000US-237316P
 PR 03-OCT-2000; 2000US-237425P
 PR 03-OCT-2000; 2000US-237598P
 PR 03-OCT-2000; 2000US-237608P
 PR 03-OCT-2000; 2000US-237608P
 PR 01-NOV-2000; 2000US-244861P
 PR 01-NOV-2000; 2000US-245084P
 PA (AVAL-) AVALON PHARM.
 XX
 PI Young PE, Augustus M, Carter KC, Ebner R, Endress G, Horrigan S;
 PT Soppet DR, Weaver Z;
 XX
 DR WPI; 2002-188264/24.

PR Screening for anti-neoplastic agent involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, and determining a change in expression of a gene of a signature gene set -

PS Claim 1; SEQ ID 5483; 44pp; English.

XX

CC The present invention describes a method (M1) for screening for an anti-neoplastic agent. The method involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, determining a change in expression of at least one gene (I) of a signature gene set, where (I) comprises a sequence (S) selected from 847 sequences (given in ABL16164 to ABL7010), or is at least 95% identical to (S), where a change in expression is indicative of anti-neoplastic activity. (I) has cytostatic activity and can be used in gene therapy. M1 can be used for screening an anti-neoplastic agent, and can be used for producing a product which is the data collected with respect to the anti-neoplastic agent as a result of M1, and the data is sufficient to convey the chemical structure and/or properties of the agent. M1 can be used in the treatment of cancer such as, colon, breast, stomach, lung, thyroid, oesophageal, ovarian, kidney, prostate or pancreatic cancer, adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer, carcinoma, papillary carcinoma and Wilm's tumour.

SQ Sequence 319 BP; 95 A; 73 C; 57 G; 94 T; 0 other;

Query Match 100.0%; Score 319; DB 24; Length 319;
 Best Local Similarity 100.0%; Pred. No. 1; 8e-85;
 Matches 319; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 TTTTTTTTCAGTGTACCATGATTAATTAAATTGAGGCCAACAAATGCTAGTC 60
 61 TTCTTAGTAAATTGAGACCATTCCTTATGCTAAAGGATGAGAATATTGCT 120
 61 TTCTTAGTACCTTGATGACACCCTTCTTAAGGATGAGAATATTGCT 120
 61 ACTATATATTTTGTGCTATCACCAAGGACTCTATGATATT 180
 121 ACTATATATTTTGTCTATCACCCAGCCAGATAACAAATGGACTCTATGATATT 180
 181 CTAAGCATAATGAGGAAGGGCTCAGGTTAATGCAAGTATCCTGTTAATGTTTC 240
 181 CTAAGCATAATGAGGAAGGGCTCAGGTTAATGCAAGTATCCTGTTAATGTTTC 240
 241 CCCACCACTGGAAATGCCCTGCCCTCGCTAACGTTCCCACAAGGTGGGGGG 300
 241 CCCACCACTGGAAACCTCCCGCTCCCTGAGCTTCCCACAAGGTGGGGGG 300
 301 AAGCAGGAGAAAAAAGG 319
 301 AAGCAGGAGAAAAAAGG 319

ALIGNMENTS

for SEQ ID NO: 180

RESULT 1 AA490819
LOCUS AA490819
DEFINITION aa49f05.s1 NCI_CGAP_GCB1 319 bp mRNA linear EST 15-AUG-1997
mRNA sequence.
ACCESSION AA490819
VERSION AA490819.1 GI:2219992
KEYWORDS EST.
SOURCE human.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 319)
AUTHORS NCI-CGAP <http://www.ncbi.nlm.nih.gov/ncicgap>.
TITLE National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
Tumor Gene Index
JOURNAL Unpublished (1997)
COMMENT Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Louis M. Staudt, M.D., Ph.D., David Allman,
Ph.D., Gerald Marti, M.D.
cDNA Library Preparation: M. Bento Soares, Ph.D., M. Fatima
Bonaldo, Ph.D.
cDNA Library Arrayed by: Greg Lennon, Ph.D.
DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
www-bio.llnl.gov/bbrp/image/image.html
Seq primer: -41ml3 fwd. ET from Amersham.

FEATURES	Source	FEATURES	Source
Location/Qualifiers		Location/Qualifiers	
1..319 /organism="Homo sapiens" /db_xref="taxon:9506" /clone="IMAGE:824289" /clone_idb="NCI-CGAP_GCB1" /tissue_type="germinal center B cell" /lab_host="DH10B" /note="Vector: pRT3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; 1st strand cDNA was prepared from human tonsillar cells enriched for germinal center B cells by flow sorting (CD20+, IgD+), provided by Dr. Louis M. Staudt (NCI), Dr. David Allman (NCI) and Dr. Gerald Marti (CBER). cDNA synthesis was primed with a Not I - oligo(dT) primer. 1.. Double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pRT3 vector. Library went through one round of normalization, and was constructed by Bento Soares and M. Patima Bonaldo."	1..369 /organism="Homo sapiens" /db_xref="taxon:9606" /clone="IMAGE:824149" /clone_idb="NCI_GAP_GCB1" /tissue_type="germinal center B cell" /lab_host="DH10B" /note="Vector: pRT3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; 1st strand cDNA was prepared from human tonsillar cells enriched for germinal center B cells by flow sorting (CD20+, IgD+), provided by Dr. Louis M. Staudt (NCI), Dr. David Allman (NCI) and Dr. Gerald Marti (CBER). cDNA synthesis was primed with a Not I - oligo(dt) primer. 1.. Double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pRT3 vector. Library went through one round of normalization, and was constructed by Bento Soares and M. Patima Bonaldo."		
BASE COUNT	95 a	BASE COUNT	73 c
ORIGIN	57 g	ORIGIN	94 t
Query Match	100.0%	Query Match	100.0%
Best Local Similarity	100.0%	Best Local Similarity	100.0%
Matches	319;	Matches	319;
Conservative	0;	Mismatches	0;
Indels	0;	Gaps	0;
ORIGIN		ORIGIN	
Qy	1 TTTTTTTTCACTGCACCATGAAATTATGACTGCCCCAACAAATGGCTAGTCTA 60	Qy	1 TTTTTTTTCACTGTACCATGAAATTATGACTGCCCCAACAAATGGCTAGTCTA 60
Db	1 TTTTTTTTCACTGCACCATGAAATTATGACTGCCCCAACAAATGGCTAGTCTA 60	Db	1 TTTTTTTTCACTGTACCATGAAATTATGACTGCCCCAACAAATGGCTAGTCTA 60
Qy	61 TTCTCACTGACTATGGATGACACCATGGTTCTTAAGGTGAGAAATTATGCT 120	Qy	61 TTCTCACTGACTATGGATGACACCATGGTTCTTAAGGTGAGAAATTATGCT 120
Db	61 TTCTCACTGACTATGGATGACACCATGGTTCTTAAGGTGAGAAATTATGCT 120	Db	61 TTCTCACTGACTATGGATGACACCATGGTTCTTAAGGTGAGAAATTATGCT 120
Qy	121 ACTATATATTTTTGTCATCACCGAGATAAATGGAATCCTATGAATATT 180	Qy	1 TTTTTTTTCACTGTACCATGAAATTATGACTGCCCCAACAAATGGCTAGTCTA 60
Db	121 ACTATATATTTTTGTCATCACCCAGGATATAAATGGCTATGAATATT 180	Db	1 TTTTTTTTCACTGTACCATGAAATTATGACTGCCCCAACAAATGGCTAGTCTA 60
Qy	181 CTAAGGCTAAATGAGAAAGGGCTCAAATGCAAGTATGTTTC 240	Qy	61 TTCTCACTGACTATGGATGACACCATGGTTCTTAAGGTGAGAAATTATGCT 120
Db	181 CTAAAGGCTAAATGAGAAAGGGCTCAAATGCAAGTATGTTTC 240	Db	61 TTCTCACTGACTATGGATGACACCATGGTTCTTAAGGTGAGAAATTATGCT 120
Qy	241 CCCACACTGGGAAATCACCTCCGCCGTCGGAGCTCCACAGGTGCGGGG 300	Qy	121 ACTATATATTTTTGCTCATACCCAGGCCAGATAAACATGGACTCTGAATT 180
Db	241 CCCACACTGGGAAATCACCTCCGCCGTCGGAGCTCCACAGGTGCGGGG 300	Db	121 ACTATATATTTTTGCTCATACCCAGGCCAGATAAACATGGACTCTGAATT 180
Qy	301 AACAGGGAAAAAAAGG 319	Qy	181 CTAAGGCTAAATGAGAAAGGGCTCCAGGTAAATGGCTAGTATGTTTC 240
Db	301 AACAGGGAAAAAAAGG 319	Db	181 CTAAGGCTAAATGAGAAAGGGCTCCAGGTAAATGGCTAGTATGTTTC 240
RESULT 2		RESULT 2	
AA490870	AA490870..369 bp	AA490870..369 bp	AA490870..369 bp
LOCUS	NCI_CGAP_GCB1	mRNA	mRNA
DEFINITION		linear	linear
VERSION	EST	EST	EST
KEYWORDS			
SOURCE	human.	human.	human.
ORGANISM	Homo sapiens	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.	Homo sapiens
REFERENCE	1 (bases 1 to 369)	REFERENCE	1 (bases 1 to 369)
AUTHORS	NCI-CGAP	AUTHORS	NCI-CGAP
TITLE	http://www.ncbi.nlm.nih.gov/ncicgap	TITLE	http://www.ncbi.nlm.nih.gov/ncicgap
JOURNAL	National Cancer Institute, Cancer Genome Anatomy Project. (CGAP), Tumor Gene Index	JOURNAL	National Cancer Institute, Cancer Genome Anatomy Project. (CGAP), Tumor Gene Index
COMMENT	Unpublished (1997)	COMMENT	Unpublished (1997)
	Contact: Robert Strausberg, Ph.D.		Contact: Robert Strausberg, Ph.D.
	Email: cgaps@mail.nih.gov		Email: cgaps@mail.nih.gov
	Tissue Procurement: Louis M. Staudt, M.D., Ph.D., David Allman,		Tissue Procurement: Louis M. Staudt, M.D., Ph.D., David Allman,

ALIGNMENTS

for SEQ ID NO: 191

RESULT 1
ABL67157
ID ABL67157 standard; DNA; 441 BP.
XX
AC ABL67157;
XX
DT 15-MAY-2002 (first entry)
XX
DE Thyroid cancer related gene sequence SEQ ID NO:5494.
XX
KW Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
KW stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
KW cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
KW gene; ds.
XX
OS Homo sapiens.
XX
PN WO200194629-A2.
XX
PD 13-DEC-2001.
XX
PF 30-MAY-2001; 2001WO-US10838.
XX
PR 05-JUN-2000; 2000US-209473P.
PR 05-JUN-2000; 2000US-209531P.
PR 18-SEP-2000; 2000US-233133P.
PR 18-SEP-2000; 2000US-233617P.
PR 20-SEP-2000; 2000US-234009P.
PR 20-SEP-2000; 2000US-234034P.
PR 20-SEP-2000; 2000US-234052P.
PR 22-SEP-2000; 2000US-234509P.
PR 22-SEP-2000; 2000US-234567P.

PR	25-SEP-2000;	2000US-234923P.	Db	1	CATTATATAGCTGAATTTTACTAATTATCTATGCAAAAAATTGTGTGCC	60
PR	25-SEP-2000;	2000US-235077P.	Qy	61	TGGCTGGATTACTCCATCAGTGTACATGATTTCTTCATTCAAGCAG	120
PR	25-SEP-2000;	2000US-235082P.	Db	61	TGGCTGGATTCTACTCCATCAGTGTACATGATTTCTTCATTCAAGCAG	120
PR	25-SEP-2000;	2000US-235134P.	Qy	121	GAGATGAATGAGCAAGTGTAGAACATGCCATAATTAGAATATTTACAA	180
PR	26-SEP-2000;	2000US-235638P.	Db	121	GAGATGAATGAGCAAGTGTAGAACATGCCATAATTAGAATATTTACAA	180
PR	27-SEP-2000;	2000US-235711P.	Qy	181	AAGCAAAAATTAACAGTGACCATATTAGTGTAGATAATAATTAGACAACT	240
PR	27-SEP-2000;	2000US-235840P.	Db	181	AAGCAAAAATTAACAGTGACCATATTAGTGTAGATAATAATTAGACAACT	240
PR	27-SEP-2000;	2000US-23863P.	Qy	240	AAGCAAAAATTAACAGTGACCATATTAGTGTAGATAATAATTAGACAACT	240
PR	28-SEP-2000;	2000US-236028P.	Db	240	AAGCAAAAATTAACAGTGACCATATTAGTGTAGATAATAATTAGACAACT	240
PR	28-SEP-2000;	2000US-236032P.	Qy	241	ATCACAAATRATACAAGGTTCTGCTGTACTGAGGATACCTATGCGACATC	300
PR	28-SEP-2000;	2000US-236033P.	Db	241	ATCACAAATRATACAAGGTTCTGCTGTACTGAGGATACCTATGCGACATC	300
PR	28-SEP-2000;	2000US-236109P.	Qy	301	ATTCACAAACAAAGTCAATGAAATGGACIATTGGAAATCATATGATTCACCG	360
PR	28-SEP-2000;	2000US-236111P.	Db	301	ATTCACAAACAAAGTCAATGAAATGGACIATTGGAAATCATATGATTCACCG	360
PR	29-SEP-2000;	2000US-236691P.	Qy	360	GGTTAACTCATTTGGTACATTACGGTTCCTTTTACTAGACTTTCGGTGGCA	420
PR	02-OCT-2000;	2000US-237172P.	Db	360	GGTTAACTCATTTGGTACATTACGGTTCCTTTTACTAGACTTTCGGTGGCA	420
PR	02-OCT-2000;	2000US-237173P.	Qy	421	GATACTGCTCCCAGSGTGTAG	441
PR	02-OCT-2000;	2000US-237278P.	Db	421	GATACTGCTCCCAGSGTGTAG	441
PR	02-OCT-2000;	2000US-237294P.	Qy	441	GATACTGCTCCCAGSGTGTAG	441
PR	02-OCT-2000;	2000US-237295P.	Db			
PR	02-OCT-2000;	2000US-237316P.	Qy			
PR	03-OCT-2000;	2000US-237425P.	Db			
PR	03-OCT-2000;	2000US-237598P.	Qy			
PR	03-OCT-2000;	2000US-237604P.	Db			

(AVAL-) AVALON PHARM.

Soppet DR, Weaver Z; WPI: 2002-188264/24.

screening for anti-neoplastic agent involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, and determining a change in expression of a gene of a signature gene set

The present invention describes a method (M1) for screening for an anti-neoplastic agent. The method involves exposing cells to a chemical agent, to be tested for anti-neoplastic activity, determining a change in expression of at least one gene (I) of a signature gene set, where (I) comprises a sequence (S) selected from 847 sequences (given in AB161664 to AB17010), or is at least 95% identical to (S), where a change in expression is indicative of anti-neoplastic activity. (I) has cytostatic activity and can be used in gene therapy. M1 can be used for screening an anti-neoplastic agent, and can be used for producing a product which is the data collected with respect to the anti-neoplastic agent as a result of M1, and the data is sufficient to convey the chemical structure and/or properties of the agent. M1 can be used in the treatment of cancer such as colon, breast, stomach, lung, thyroid, oesophageal, ovarian, kidney, prostate or pancreatic cancer, adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer, infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine carcinoma, papillary carcinoma and Wilms' tumour.

RESULT 1
NT1063
LOCUS
DEFINITION
IMAGE:299420 3', mRNA sequence.
ACCESSION
VERSION
KEYWORDS
TITLE
JOURNAL
COMMENT
ORGANISM

N71063
zab6all.s1 Soares_fetal_lung_NBHL19W Homo sapiens cDNA clone
N71063
N71063.1 GI:1227543
EST.

human.
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.
1 (bases 1 to 441)

Hillier,L., Clark,N., Dubuque,T., Elliston,K., Hawkins,M., Holman,
,M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marra,M., Parsons,J.,
Rifkin,L., Rohlfing,T., Soares,M., Tan,F., Trevaskis,E., Waterston,
,R., Williamson,A., Wohldmann,P. and Wilson,R.

The WashU-Merck EST Project

Unpublished

Contact: Wilson RK

Washington University School of Medicine

4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108

Tel: 314 286 1800

Fax: 314 286 1810

Email: est@watson.wustl.edu

This clone is available royalty-free through TIBL ; contact the

IMAGE Consortium (info@image.lnl.gov) for further information.

Seq primer: ml3 -40 forward

High quality sequence stop: 344.

Mon Jun 23 10:00:37 2003

us-09-96

FEATURES

source

Location/Qualifiers

l. . 441

/organism="Homo sapiens"

/db_xref="GDB:1244344"

/db_xref="taxon:9606"

/clone="IMDB:299420"

/clone.lib="Soares_fetal_lung_NBHL19W"

/dev_stage="19 weeks"

/lab_host="DHL0B (ampicillin resistant)"

/note="Organ: lung; Vector: pPT3D (Pharmacia) with a modified polylinker; Site.1: Not I; Site.2: Eco RI; 1st

strand cDNA was primed with a Not I - oligo(dt) primer [5'-TGTGTACCATCGAACGGAGCCGCCAATTTTTTTTTTT-3'],

double-stranded cDNA was size selected, ligated to Eco RI

adapters (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of a modified pPT3 vector

(Pharmacia). Library went through one round of normalization to a Cot = 5. Library constructed by Bento

Soares and M.Fatima Bonaldo. This library was constructed from the same fetus as the fetal heart library. Soares

BASE COUNT

158 a 68 c 72 g 143 t

ORIGIN

Query Match 100%; Score 441; DB 14; Length 441;

Best Local Similarity 100.0%; Pred. No. 2.2e-75;

Matches 441; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 CATTATATAAGCTGAAATTATTACTAAATTATCTATGCAAAAAATTCTGTGCC 60

Db 1 CATTATATAAGCTGAAATTATTACTAAATTATCTATGCAAAAAATTCTGTGCC 60

OY 61 TGGCGTTGGAATTTCACTCCATCAGTGTTACATGTTTCTTCAACAG 120

Db 61 TGGCGTTGGAATTTCACTCCATCAGTGTTACATGTTTCTTCAACAG 120

OY 121 GAGATGATGAGTGGACAGTGTAGGAAACAGGGCAATAATTAGATATAATTCAA 180

Db 121 GAGATGATGAGTGGACAGTGTAGGAAACAGGGCAATAATTAGATATAATTCAA 180

OY 181 AAGGAAAAAATTAACAGTGTAGGAACTATTAATGAACTGAGTAACTGACACT 240

Db 181 AAGGAAAAAATTAACAGTGTAGGAACTATTAATGAACTGAGTAACTGACACT 240

OY 241 AATCACATAATAACAGGTTATTCTCTCTGACTGAGTAACTGACACT 300

Db 241 AATCACATAATAACAGGTTATTCTCTCTGACTGAGTAACTGACACT 300

OY 301 ATTCACACAAAAGTCTTATGAACTGAGTAACTGACACT 360

Db 301 ATTCACACAAAAGTCTTATGAACTGAGTAACTGACACT 360

OY 360 GGTTAAATCATAGGGACATTACCCCTTCCCTTTAGTAGGACTTATCCAGGGCA 420

Db 361 GGTTAAATCATAGGGACATTACCCCTTCCCTTTAGTAGGACTTATCCAGGGCA 420

OY 421 GATACTCTCCAGGTGTAAG 441

Db 421 GATACTCTCCAGGTGTAAG 441

ALIGNMENTS

RESULT 1
ABL67165

for SEQ ID NO:199

ID ABL67165 standard; DNA; 448 BP.

XX

AC ABL67165;

XX

DT 15-MAY-2002 (first entry)

XX

DE Thyroid cancer related gene sequence SEQ ID NO:5502.

XX

KW Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
KW stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
KW cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
KW gene; ds.

XX

OS Homo sapiens.

XX

PN WO200194629-A2.

XX

PD 13-DEC-2001.

XX

PF 30-MAY-2001; 2001WO-US10838.

XX

PR 05-JUN-2000; 2000US-209473P.

PR 05-JUN-2000; 2000US-209531P.

PR 18-SEP-2000; 2000US-233133P.

PR 18-SEP-2000; 2000US-233617P.

PR 20-SEP-2000; 2000US-234009P.

PR 20-SEP-2000; 2000US-234034P.

PR 20-SEP-2000; 2000US-234052P.

PR 22-SEP-2000; 2000US-234509P.

PR 22-SEP-2000; 2000US-234567P.

PR 25-SEP-2000; 2000US-234923P. Db 1 TTTTTTGTGAAACAAATTCTTATTCATTTGGAGTTCTGACAG 60
 PR 25-SEP-2000; 2000US-234924P. QY 61 AAAATACATTGATTTCTGATATGATCAGCCGTGACCTTGTA 120
 PR 25-SEP-2000; 2000US-235082P. Db 61 AAAATACATTGATTTCTGATATGATCAGCCGTGACCTTGTA 120
 PR 25-SEP-2000; 2000US-235134P. PR 26-SEP-2000; 2000US-235280P.
 PR 26-SEP-2000; 2000US-235637P. PR 26-SEP-2000; 2000US-235638P.
 PR 27-SEP-2000; 2000US-235711P. PR 27-SEP-2000; 2000US-235720P.
 PR 27-SEP-2000; 2000US-235840P. PR 27-SEP-2000; 2000US-235863P.
 PR 28-SEP-2000; 2000US-236028P. PR 28-SEP-2000; 2000US-236032P.
 PR 28-SEP-2000; 2000US-236033P. PR 28-SEP-2000; 2000US-236034P.
 PR 28-SEP-2000; 2000US-236109P. PR 28-SEP-2000; 2000US-236111P.
 PR 29-SEP-2000; 2000US-236642P. PR 29-SEP-2000; 2000US-236691P.
 PR 02-OCT-2000; 2000US-237173P. PR 02-OCT-2000; 2000US-237172P.
 PR 02-OCT-2000; 2000US-237278P. PR 02-OCT-2000; 2000US-237294P.
 PR 02-OCT-2000; 2000US-237295P. PR 02-OCT-2000; 2000US-237716P.
 PR 03-OCT-2000; 2000US-237425P. PR 03-OCT-2000; 2000US-237598P.
 PR 03-OCT-2000; 2000US-237604P. PR 03-OCT-2000; 2000US-237608P.
 PR 01-NOV-2000; 2000US-244867P. PR 01-NOV-2000; 2000US-245084P.
 XX PA (AVAL-) AVALON PHARM.
 XX PA
 PI Young PE, Augustus M, Carter KC, Ebner R, Endress G, Horrigan S;
 PI Soppet DR, Weaver Z;
 XX DR
 XX WPI: 2002-188264/24.

PT Screening for anti-neoplastic agent involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, and determining a change in expression of a gene of a signature gene set. -
 PS Claim 1: SEQ ID 5502; 44pp; English.

XX
 CC The present invention describes a method (M1) for screening for an anti-neoplastic agent. The method involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, determining a change in expression of at least one gene (I) of a signature gene set, where (I) comprises a sequence (S) selected from 8447 sequences (given in ABL51664 to AB170110), or is at least 95% identical to (S), where a change in expression is indicative of anti-neoplastic activity. (I) has cytostatic activity and can be used in gene therapy. M1 can be used for screening an anti-neoplastic agent, and can be used for producing a product which is the data collected with respect to the anti-neoplastic agent as a result of M1, and the data is sufficient to convey the chemical structure and/or properties of the agent. M1 can be used in the treatment of cancer such as colon, breast, stomach, lung, thyroid, oesophageal, ovarian, kidney, prostate or pancreatic cancer, adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer, infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine carcinoma, papillary carcinoma and Wilm's tumour.

XX Sequence 448 BP: 127 A; 89 C; 82 G; 150 T; 0 other:
 Query Match 100 %; Score 448; DB 24; Length 448;
 Best Local Similarity 100.0%; Pred. No. 6.9e-102;
 Matches 448; Conservative 0; Mismatches 0; Index 0; Gaps 0;

QY 1 TTTTTTGTGAAACAAATTCTTATTCATTTGGAGTTCTGACAG 60
 61 AAAATACATTGATTTCTGATATGATCAGCCGTGACCTTGTA 120
 61 AAAATACATTGATTTCTGATATGATCAGCCGTGACCTTGTA 120
 121 TTCTTATACACTATGATTTGGTTGAGCACAAATGAGGTTAA 180
 121 TTCTTATACACTATGATTTGGTTGAGCACAAATGAGGTTAA 180
 181 AAAATATGTCAGAGTGCCTCCAGAACACACAGGATGACAGTGCCTTGCCCCATACA 240
 181 AAAATATGTCAGAGTGCCTCCAGAACACACAGGATGACAGTGCCTTGCCCCATACA 240
 Db 181 AAAATATGTCAGAGTGCCTCCAGAACACACAGGATGACAGTGCCTTGCCCCATACA 240
 QY 241 GAGATAAATTTAGTTGAGATGTTGAGTCCTTCCTAGAGATGTTGAGTCAGTGCCT 300
 241 GAGATAAATTTAGTTGAGATGTTGAGTCCTTCCTAGAGATGTTGAGTCAGTGCCT 300
 Db 301 ATGGCTTACTGCATACCTGACATGAGTCAGTGCCT 300
 301 ATGGCTTACTGCATACCTGACATGAGTCAGTGCCT 300
 Db 361 AGCTTATCTGGGACCAAGAGAGAAATTATCCCTACTCTCTGCCCACCTAAGC 420
 361 AGCTTATCTGGGACCAAGAGAGAAATTATCCCTACTCTCTGCCCACCTAAGC 420
 Db 361 AGCTTATCTGGGACCAAGAGAGAAATTATCCCTACTCTCTGCCCACCTAAGC 420
 360 TCCCCATTCAGTGGCTCTTCCTGGT 448
 421 TCCCCATTCAGTGGCTCTTCCTGGT 448
 Db 421 TCCCCATTCAGTGGCTCTTCCTGGT 448

1 TTTTTTTTTATGGGACACAATTTCTTTATTTCTATTTGGAGTTCTGACAG 60
 1 TTTTTTTTTATGGGACACAATTTCTTTATTTCTATTTGGAGTTCTGACAG 60

RESULT 1
AU243738
LOCUS
DEFINITION 2r6cJ2.s1 Soares_NhMPU_S1 Homo sapiens cDNA clone IMAGE:668566
VERSION AA243738
KEYWORDS EST
SOURCE human.

ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.
REFERENCE 1 (bases 1 to 448)
Hiller,L., Clark,N., Dubuque,T., Elliston,K., Hawkins,M., Holman,
M., Hultman,M., Kuceba,T., Le M., Lennon,G., Marra,M., Parsons,J.,
Rifkin,L., Rohlfing,T., Soares,M., Tan,F., Trevaskis,E., Waterston,
R., Williamson,A., Wohldmann,P., and Wilson,R.

TITLE The WashU-Merck EST Project
JOURNAL Unpublished (1995)
COMMENT Contact: Wilson RK
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@wustl.wustl.edu
This clone is available royalty-free through LILN; contact the
IMAGE Consortium (info@image.jnl.gov) for further information.
Seq primer: -41m3 fwd. ET from Amersham
High quality sequence stop: 349.

Mon Jun 23 10:00:38 2003

us-09-964

FEATURES
Source
Location/Qualifiers
1. .448
/organism="Homo sapiens"
/db_xref="GDB:5563533"
/clone="IMAGE:668566"
/clone_id="Soares_NhMPU_S1"
/tissue_type="Pooled human melanocyte, fetal heart, and
pregnant uterus"
/lab_host="D10B"
/note="Organ: mixed (see below); Vector: pRT3D-Pac
(Pharmacia) with a modified polylinker; site_1: Not 1;
Site_2: Eco RI; Equal amounts of plasmid DNA from three
normalized libraries (melanocyte 2NBIM, pregnant uterus
NbHU, and fetal heart NbH9W) were mixed and ss circles
were made in vitro. Following HAP purification, this DNA
was used as tracer in a subtractive hybridization
reaction. The driver was PCR-amplified cDNAs from pools of
5,000 clones made from the same 3 libraries. The pools
consisted of T.M.A.G.E. clones 360232-265223,
340488-345479, and 484488-489479."

BASE COUNT
ORIGIN
Query Match 100.0%; Score 448; DB 9; Length 448;
Best Local Similarity 100.0%; Pred. No. 5.3e-73;
Matches 448; Conservative 0; Mismatches 0; Inels 0; Gaps 0;
QY 1 TTCTTTTTTATGTGACACATTTCTTATTCAATTGGAGTTTCGACAG 60
Db 1 TTTTTTTTTATGTGACACATTTCTTATTCAATTGGAGTTTCGACAG 60
QY 61 AAAAATACAATTGATTTCGTATATTGACATTTCTTATTCAATTGGAGTTTCGACAG 120
Db 61 AAAAATACAATTGATTTCGTATATTGACATTTGGAGTTTCGACAG 120
QY 121 TTCTATACACTATGATTTCGTATATTGACATTTGGAGTTTCGACAG 180
Db 121 TTCTATACACTATGATTTCGTATATTGACATTTGGAGTTTCGACAG 180
QY 181 AAAAATTCGAGCTGGCCCGAGCACACAGGATGACAGRCCTTGCCATACA 240
Db 181 AAAAATTCGAGCTGGCCCGAGCACACAGGATGACAGRCCTTGCCATACA 240
QY 241 GAGATTAATTAGTTTCGAGCTTCATAGAGTTGATGGCAGTAGCATTTCT 300
Db 241 GAGATTAATTAGTTTCGAGCTTCATAGAGTTGATGGCAGTAGCATTTCT 300
QY 301 ATGGCCTACTGCCATACACCTGAACTGAGTCAGGAAGTTAGGTGACTGGCCACAG 360
Db 301 ATGGCCTACTGCCATACACCTGAACTGAGTCAGGAAGTTAGGTGACTGGCCACAG 360
QY 361 AGCTTAACTGGAGGCCAGAGAAATTATCCCTACCTCTCTGGCCACTAAC 420
Db 361 AGCTTAACTGGAGGCCAGAGAAATTATCCCTACCTCTCTGGCCACTAAC 420
QY 421 TCCCATTCAGTGGCTGCTTCGTT 448
Db 421 TCCCATTCAGTGGCTGCTTCGTT 448

ALIGNMENTS

RESULT 1
ABL67310
ID ABL67310 standard; DNA; 283 BP.
XX
AC ABL67310;
XX
DT 15-MAY-2002 (first entry)
XX
DE Thyroid cancer related gene sequence SEQ ID NO:5647.
XX
KW Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
KW stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
KW cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
KW gene; ds.
XX
OS Homo sapiens.
XX
PN WO200194629-A2.
XX
PD 13-DEC-2001.
XX
PF 30-MAY-2001; 2001WO-US10838.
XX
PR 05-JUN-2000; 2000US-209473P.
PR 05-JUN-2000; 2000US-209531P.
PR 18-SEP-2000; 2000US-233133P.
PR 18-SEP-2000; 2000US-233617P.
PR 20-SEP-2000; 2000US-234009P.
PR 20-SEP-2000; 2000US-234034P.
PR 20-SEP-2000; 2000US-234052P.
PR 22-SEP-2000; 2000US-234509P.
PR 22-SEP-2000; 2000US-234567P.

PR 25-SEP-2000; 20000US-234923P. Qy 1 GCGGCCGCTCTAAGAACCTGCTGGCAGGGCACATGGCATGGCAAGAGGTAA
 PR 25-SEP-2000; 20000US-235077P. Db 61 GGGCCGAGGACCTGGCACGGGACATGGCATGGCAAGAGGTAA
 PR 25-SEP-2000; 20000US-235082P. Db 61 GGGCCGAGGACCTGGCACGGGACATGGCATGGCAAGAGGTAA
 PR 25-SEP-2000; 20000US-235134P. Db 61 GGGCCGAGGACCTGGCACGGGACATGGCATGGCAAGAGGTAA
 PR 26-SEP-2000; 20000US-235637P. Qy 121 CGGACAGAGCTGGCATCTCCCAGGCCATCCATGCGAGCAGG
 PR 26-SEP-2000; 20000US-235638P. Db 121 CGGACAGAGCTGGCATCTCCCAGGCCATCCATGCGAGCAGG
 PR 27-SEP-2000; 20000US-235711P. Db 121 CGGACAGAGCTGGCATCTCCCAGGCCATCCATGCGAGCAGG
 PR 27-SEP-2000; 20000US-235720P. Db 121 CGGACAGAGCTGGCATCTCCCAGGCCATCCATGCGAGCAGG
 PR 27-SEP-2000; 20000US-235840P. Qy 181 CGGAGTACTCAGTCAGTGCTGGCAAGGTGGCTCTGAACGCGCA
 PR 27-SEP-2000; 20000US-235863P. Db 181 CGGAGTACTCAGTCAGTGCTGGCAACCCAGTGAGCCGGAG
 PR 28-SEP-2000; 20000US-236028P. Qy 241 ACGGTGCTCACCCCCGGCTGGACACCCAGTGAGCCGGAG
 PR 28-SEP-2000; 20000US-236032P. Db 241 ACGGTGCTCACCCCCGGCTGGACACCCAGTGAGCCGGAG
 PR 28-SEP-2000; 20000US-236034P. Db 241 ACGGTGCTCACCCCCGGCTGGACACCCAGTGAGCCGGAG
 PR 28-SEP-2000; 20000US-236109P. Qy 181 CGGAGTACTCAGTCAGTGCTGGCAAGGTGGCTCTGAACGCGCA
 PR 28-SEP-2000; 20000US-236111P. Db 181 CGGAGTACTCAGTCAGTGCTGGCAACCCAGTGAGCCGGAG
 PR 29-SEP-2000; 20000US-23642P. Qy 241 ACGGTGCTCACCCCCGGCTGGACACCCAGTGAGCCGGAG
 PR 29-SEP-2000; 20000US-23691P. Db 241 ACGGTGCTCACCCCCGGCTGGACACCCAGTGAGCCGGAG
 PR 02-OCT-2000; 20000US-237172P. Db 241 ACGGTGCTCACCCCCGGCTGGACACCCAGTGAGCCGGAG
 PR 02-OCT-2000; 20000US-237173P. Db 241 ACGGTGCTCACCCCCGGCTGGACACCCAGTGAGCCGGAG
 PR 02-OCT-2000; 20000US-237278P. Qy 181 CGGAGTACTCAGTCAGTGCTGGCAAGGTGGCTCTGAACGCGCA
 PR 02-OCT-2000; 20000US-237294P. Db 181 CGGAGTACTCAGTCAGTGCTGGCAACCCAGTGAGCCGGAG
 PR 02-OCT-2000; 20000US-237795P. Qy 241 ACGGTGCTCACCCCCGGCTGGACACCCAGTGAGCCGGAG
 PR 02-OCT-2000; 20000US-237796P. Db 241 ACGGTGCTCACCCCCGGCTGGACACCCAGTGAGCCGGAG
 PR 02-OCT-2000; 20000US-237797P. Db 241 ACGGTGCTCACCCCCGGCTGGACACCCAGTGAGCCGGAG
 PR 03-OCT-2000; 20000US-237825P. Qy 181 CGGAGTACTCAGTCAGTGCTGGCAAGGTGGCTCTGAACGCGCA
 PR 03-OCT-2000; 20000US-237845P. Db 181 CGGAGTACTCAGTCAGTGCTGGCAACCCAGTGAGCCGGAG
 PR 03-OCT-2000; 20000US-237860P. Qy 241 ACGGTGCTCACCCCCGGCTGGACACCCAGTGAGCCGGAG
 PR 03-OCT-2000; 20000US-237867P. Db 241 ACGGTGCTCACCCCCGGCTGGACACCCAGTGAGCCGGAG
 PR 01-NOV-2000; 20000US-24467P. Qy 181 CGGAGTACTCAGTCAGTGCTGGCAAGGTGGCTCTGAACGCGCA
 PR 01-NOV-2000; 20000US-245084P. Db 181 CGGAGTACTCAGTCAGTGCTGGCAACCCAGTGAGCCGGAG
 XX PA (AVAL-) AVALON PHARM.

XX PI Young PE, Augustus M, Carter KC, Ebner R, Endress G, Horrigan S;

XX PI Soppet DR, Weaver Z; DR WPI: 2002-188264/24.

XX PT Screening for anti-neoplastic agent involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, and determining a change in expression of a gene of a signature gene set - PS Claim 1; SEQ ID 5647; 44PP; English.

CC The present invention describes a method (M1) for screening for an anti-neoplastic agent. The method involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, determining a change in expression of at least one gene (1) of a signature gene set, where (1) comprises a sequence (S) selected from 8447 sequences (given in ABU61664 to ABU70110), or is at least 95% identical to (S), where a change in expression is indicative of anti-neoplastic activity. (1) has cytostatic activity and can be used in gene therapy. M1 can be used for screening an anti-neoplastic agent, and can be used for producing a product which is the data collected with respect to the anti-neoplastic agent as a result of M1, and the data is sufficient to convey the chemical structure and/or properties of the agent. M1 can be used in the treatment of cancer such as colon, breast, stomach, lung, thyroid, oesophageal, ovarian, kidney, prostate or pancreatic cancer, adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer, infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine carcinoma, papillary carcinoma and Wilms' tumour.

CC SQ Sequence 283 BP; 63 A; 95 C; 90 G; 35 T; 0 other;

CC Query Match 100.0%; Score 283; DB 24; Length 283;

CC Best Local Similarity 100.0%; Pred. No. 3.2e-66; Mismatches 0; Indels 0; Gaps 0;

CC Matches 283; Conservative 0; Mismatches 0;

1 GCAGGCCCTCTAAGAACCTGCTGGCTGGCCAGCCAAAGGAGCCAGCTGCT

Mon Jun 23 10:00:39 2003

us-09-96

for SEQ ID NO: 347

RESULT 1
 AA411711
 LOCUS AA411711 283 bp mRNA linear EST 17-MAY-1997
 DEFINITION 3', mRNA sequence.
 ACCESSION AA411711
 VERSION AA411711.1 GI: 2059500
 KEYWORDS EST.
 SOURCE human.
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Homidae; Homo.
 1 (bases 1 to 283)
 Hillier,L., Allen,M., Bowles,L., Dubucue,T., Geisel,G., Jost,S.,
 Kucaba,T., Lacy,M., Le-N., Lennon,G., Marra,M., Martin,J., Moore,B.,
 Schellenberg,K., Steptoe,M., Tan,F., Theising,B., White,Y., Wylie,
 T., Waterston,R. and Wilson,R.
 WASHU-Merck EST Project 1997
 Unpublished (1997)
 Contact: Wilson RK
 Washington University School of Medicine
 4144 Forest Park Parkway, Box 8501, St. Louis, MO 63108
 Tel: 314 286 1800
 Fax: 314 286 1810
 Email: est@wustl.edu
 This clone is available royalty-free through LLNL; contact the
 IMAGE Consortium (info@image.llnl.gov) for further information.
 Possible reversed clone: polyT not found
 Seq primer: -4lm13 fwd. ET from Amersham.

FEATURES
 SOURCE
 FEATURES
 SOURCE
 location/qualifiers
 1. . 283
 /organism="Homo sapiens"
 /db_xref="GDB:976674"
 /clone_xref="IMAGE:753807"
 /clone_lib="Soares_NhMPU_S1"
 /tissue_type="Pooled pregnant uterus"
 /lab_host="DH10B"
 /note="Organ: mixed (see below); Vector: pRT73D-Pac
 (Pharmacia) with a modified Polylinker; Site_1: Not I;
 Site_2: Eco RI; Equal amounts of plasmid DNA from three
 normalized libraries (melanocyte 2NBH, pregnant uterus
 NBHPU, and fetal heart NBH9W) were mixed and ss circles
 were made in vitro. Following HAP purification, this DNA
 was used as tracer in a subtractive hybridization
 reaction. The driver was PCR-amplified cDNAs from pools of
 5,000 clones made from the same 3 libraries. The pools
 consisted of T.M.A.G.E. clones 260232-265223, 340488-345479, and 48488-489479."
 BASE COUNT 63 a 95 c 90 g 35 t
 ORIGIN
 Query Match 100.0% Score 283; DB 9; Length 283;
 Best local Similarity 100.0%; Pred. No. 6 6e-63;
 Matches 283; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 GCAGCCGCCCTCCAGAACCTGCGCTGGTCGGCAAGCCAAAGGCCACGTGTTG
 Db 1 GCACCGCCTCCATAGAACCTGCTGCTGCTGCTGGTCGGCAAGCCAAAGGCCAGCTGTTG 60
 Qy 61 GCGCCGAGGAGCTGTCGACCGGCACATGCCATGCCAGAGTAAGAACGACCGGG
 Db 61 GCGCCGAGGAGCTGTCGACCGGCACATGCCATGCCAGAGTAAGAACGACCGGG 120
 Qy 121 CGAACAGAACGCTGGCATCTCCAGCCATCCTATCAGCACAGGCCAACAGCAGAAGG
 Db 121 CGAACAGAACGCTGGCATCTCCCAACCCATCCTATCAGCACAGGCCAACAGCAGAAGG 180
 Qy 181 CCGACTTCAAGCCCGCTCTGCAACCCAGTGAGCCAGTGAGCCGAG 240
 Db 181 CGGAGTACTCAGACGCTCTGSCCAACCTGGCTTCCGAACCCAGTGAGCCGAG 240
 Qy 241 ACGGTCCTACGCCCGCTCTGCAACCCAGTGAGCCGAG 240
 Db 241 ACGGTCCTACGCCCGCTCTGCAACCCAGTGAGCCGAG 283

us-09-964-824C-381.Fng

RESULT 3
 ABL67347
 ID ABL67347 standard; DNA; 165 BP.
 XX
 AC ABL67347;
 XX
 DT 15-MAY-2002 (first entry)
 XX
 DE Thyroid cancer related gene sequence SEQ ID NO:5684.
 XX
 KW Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
 KW stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
 KW cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
 KW gene; ds;
 XX
 OS Homo sapiens.
 XX
 PN WO200194629-A2.
 XX
 PD 13-DEC-2001.
 XX
 PF 30-MAY-2001; 2001WO-US10838.
 XX
 PR 05-JUN-2000; 2000US-209473P.
 PR 05-JUN-2000; 2000US-209531P.
 PR 18-SEP-2000; 2000US-233133P.
 PR 18-SEP-2000; 2000US-233617P.
 PR 20-SEP-2000; 2000US-234008P.
 PR 20-SEP-2000; 2000US-234034P.
 PR 22-SEP-2000; 2000US-234509P.
 PR 22-SEP-2000; 2000US-234567P.
 PR 25-SEP-2000; 2000US-234923P.
 PR 25-SEP-2000; 2000US-235077P.
 PR 25-SEP-2000; 2000US-235082P.
 PR 25-SEP-2000; 2000US-235134P.
 PR 25-SEP-2000; 2000US-235280P.
 PR 26-SEP-2000; 2000US-235637P.
 PR 27-SEP-2000; 2000US-235711P.
 PR 27-SEP-2000; 2000US-235720P.
 PR 27-SEP-2000; 2000US-235840P.
 PR 27-SEP-2000; 2000US-235863P.
 PR 28-SEP-2000; 2000US-236028P.
 PR 28-SEP-2000; 2000US-236032P.
 PR 28-SEP-2000; 2000US-236033P.
 PR 28-SEP-2000; 2000US-236034P.
 PR 28-SEP-2000; 2000US-236109P.
 PR 29-SEP-2000; 2000US-236111P.
 PR 29-SEP-2000; 2000US-236842P.
 PR 29-SEP-2000; 2000US-236841P.
 PR 02-OCT-2000; 2000US-237172P.
 PR 02-OCT-2000; 2000US-237173P.
 PR 02-OCT-2000; 2000US-237278P.
 PR 02-OCT-2000; 2000US-237294P.
 PR 02-OCT-2000; 2000US-237295P.
 PR 02-OCT-2000; 2000US-237316P.
 PR 03-OCT-2000; 2000US-237425P.
 PR 03-OCT-2000; 2000US-237598P.
 PR 03-OCT-2000; 2000US-237634P.
 PR 03-OCT-2000; 2000US-237666P.
 PR 03-OCT-2000; 2000US-237680P.

PR 01-NOV-2000; 2000US-244867P.
 PR 01-NOV-2000; 2000US-245084P.
 XX
 PA (AVAL-) AVALON PHARM.
 XX
 PI Young PE, Augustus M, Carter KC, Ebner R, Endress G, Horrigan S;
 Soppet DR, Weaver Z;
 XX
 DR WPI; 2002-188264/24.
 XX
 PT Screening for anti-neoplastic agent involves exposing cells to a
 PT chemical agent to be tested for anti-neoplastic activity, and
 PT determining a change in expression of a gene of a signature gene set -
 XX
 PS Claim 1; SEQ ID 5684; 44pp; English.
 XX
 CC The present invention describes a method (M1) for screening for an
 CC anti-neoplastic agent. The method involves exposing cells to a chemical
 CC agent to be tested for anti-neoplastic activity, determining a change in
 CC expression of at least one gene (I) of a signature gene set, where (I)
 CC comprises a sequence (S) selected from 84/ sequences (given in ABL6164
 CC to ABL7011), or is at least 95% identical to (S), where a change in
 CC expression is indicative of anti-neoplastic activity. (I) has cytostatic
 CC activity, and can be used in gene therapy. M1 can be used for screening
 CC an anti-neoplastic agent, and can be used for producing a product which
 CC is the data collected with respect to the anti-neoplastic agent as a
 CC result of M1, and the data is sufficient to convey the chemical
 CC structure and/or properties of the agent. M1 can be used in the
 CC treatment of cancer such as colon, breast, stomach, lung, thyroid,
 CC oesophageal, ovarian, kidney, prostate or pancreatic cancer,
 CC adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer,
 CC infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine
 XX carcinoma, papillary carcinoma and Wilm's tumour.
 SQ Sequence 165 BP; 68 A; 22 C; 23 G; 52 T; 0 other;

Query	Match	Score	DB	Length
Best	Local Similarity	100.0%	24	165
Matches	Conservative	100.0%	Pred. No.	3.7e-27;
Matches	Mismatches	0;	Indels	0;
Matches	Gaps	0;		

QY 1 CTCCTTGAGTAACCTTAATTGAGGAGTTCCATAACCATAGAACATACATAAATGA 60
 DB 1 CTCCTTGAGTAACCTTAATTGAGGAGTTCCATAACCATAGAACATACATAAATGA 60

QY 61 CACACCAGTGTGACAATGAAACAAAACAGCATGATATTTCAGCTTTAAGTT 120
 DB 61 CACACCAGTGTGACAATGAAACAAAACAGCATGATATTTCAGCTTTAAGTT 120

QY 121 AAAAATGATGCTGTTAACACAAACAAAGTTAGATATTAG 165
 DB 121 AAAAATGATGCTGTTAACACAAACAAAGTTAGATATTAG 165

RESULT 4
 ABL69408
 ID ABL69408 standard; DNA; 165 BP.
 XX
 AC ABL69408;
 XX
 DT 15-MAY-2002 (first entry)
 XX
 DE Prostate cancer related gene sequence SEQ ID NO:7745.
 XX
 KW Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
 KW stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
 KW cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
 KW gene; ds;
 XX
 OS Homo sapiens.
 XX
 PN WO200194629-A2.
 XX
 PD 13-DEC-2001.

XX	PF	30-MAY-2001: 2001WO-US10838.
PR	05-JUN-2000: 2000US-209473P.	CC adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer,
PR	05-JUN-2000: 2000US-209531P.	CC infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine
PR	18-SEP-2000: 2000US-233133P.	CC carcinoma, papillary carcinoma and Wilms' tumour.
PR	18-SEP-2000: 2000US-233617P.	XX
PR	20-SEP-2000: 2000US-234009P.	SQ Sequence 165 BP; 68 A; 22 C; 23 G; 52 T; 0 other;
PR	20-SEP-2000: 2000US-234034P.	Query Match 100.0%; Score 165; DB 24; Length 165;
PR	20-SEP-2000: 2000US-234052P.	Blast Local Similarity 100.0%; Pred. No. 3.7e-27;
PR	22-SEP-2000: 2000US-234509P.	Matches 165; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
PR	25-SEP-2000: 2000US-23467P.	Qy 1 CTCTTGAGACTTATTTGGAGGAGTCATAAGCATAGGAACATAGATAAATGA
PR	25-SEP-2000: 2000US-234923P.	Db 1 CTCTTGAGACTTATTTGGAGGAGTCATAAGCATAGGAACATAGATAAATGA
PR	25-SEP-2000: 2000US-234924P.	Qy 61 CACACCACTGTGACATGAAAAAAACAGCATTGATTTCCAGCTTTAGTT
PR	25-SEP-2000: 2000US-235077P.	Db 61 CACACCACTGTGACATGAAAAAAACAGCATTGATTTCCAGCTTTAGTT
PR	25-SEP-2000: 2000US-235082P.	Qy 121 AAAAATGATCTAGTAAACAAACAAAGTTAGATATTAG
PR	25-SEP-2000: 2000US-235134P.	Db 121 AAAAATGATCTAGTAAACAAACAAAGTTAGATATTAG
PR	25-SEP-2000: 2000US-235280P.	PR 26-SEP-2000: 2000US-235537P.
PR	26-SEP-2000: 2000US-235538P.	PR 26-SEP-2000: 2000US-235631P.
PR	27-SEP-2000: 2000US-235720P.	PR 27-SEP-2000: 2000US-235840P.
PR	27-SEP-2000: 2000US-235863P.	PR 28-SEP-2000: 2000US-235602P.
PR	28-SEP-2000: 2000US-236032P.	PR 28-SEP-2000: 2000US-236033P.
PR	28-SEP-2000: 2000US-236304P.	PR 28-SEP-2000: 2000US-236109P.
PR	28-SEP-2000: 2000US-236111P.	PR 29-SEP-2000: 2000US-236842P.
PR	29-SEP-2000: 2000US-236891P.	PR 29-SEP-2000: 2000US-237172P.
PR	02-OCT-2000: 2000US-237173P.	PR 02-OCT-2000: 2000US-237278P.
PR	02-OCT-2000: 2000US-237294P.	PR 02-OCT-2000: 2000US-237295P.
PR	02-OCT-2000: 2000US-237310P.	PR 03-OCT-2000: 2000US-237425P.
PR	03-OCT-2000: 2000US-237598P.	PR 03-OCT-2000: 2000US-237604P.
PR	03-OCT-2000: 2000US-237605P.	PR 03-OCT-2000: 2000US-237608P.
PR	01-NOV-2000: 2000US-24467P.	PR 01-NOV-2000: 2000US-245084P.
PA	XX	(AVAL-) AVALON PHARM.
PA	XX	PT Young PE, Augustus M, Carter KC, Ebner R, Endress G, Horrigan S;
PA	XX	PI Soppet DR, Wedder Z;
PA	XX	DR WPI: 2002-188264/24.
PT	Screening for anti-neoplastic agent involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, and determining a change in expression of a gene of a signature gene set -	CC
PT	The present invention describes a method (M1) for screening for an anti-neoplastic agent. The method involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, determining a change in expression of at least one gene (1) of a signature gene set, where (1) comprises a sequence (S) selected from 8447 sequences (given in ABL16164 to ABL7010), or is at least 95% identical to (S), where a change in expression is indicative of anti-neoplastic activity. (1) has cytosolic activity and can be used in gene therapy. M1 can be used for screening an anti-neoplastic agent, and can be used for producing a product which is the data collected with respect to the anti-neoplastic agent as a result of M1, and the data is sufficient to convey the chemical structure and/or properties of the agent. M1 can be used in the treatment of cancer such as colon, breast, stomach, lung, thyroid, adrenocortical, ovarian, kidney, prostate or pancreatic cancer,	adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer, infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine carcinoma, papillary carcinoma and Wilms' tumour.
PS	Claim 1; SEQ ID 7745; 44pp; English.	XX
PS	WPO200118022-A1.	XX
PN	15-MAR-2001.	XX
PD	31-AUG-2000; 2000WO-US24008.	XX
PR	03-SEP-1999; 9905-0152315.	XX
PR	03-SEP-1999; 9905-0152317.	XX
PA	(HUMA-) HUMAN GENOME SCI INC.	XX
PA	Ni J, Baker KP, Birse CE, Fiscella M, Komatsoulis GA, Rosen CA; Soppet DR, Young PE, Ebner R, Duan DR, Olsen HS, Lafleur DM; Moore RA, Shi Y, Wei Y, Florence KA; DR WPI: 2001-203081/20. P-PSDB; AAB87345.	XX
PT	Nucleic acid molecules encoding human secreted proteins, used in preventing, treating or ameliorating a disorder, e.g. Alzheimer's and Parkinson's diseases and cancers -	CC
PT	Claim 1; Page 490-491; 607pp; English.	XX
CC	AF91858-AF91929 represent cDNAs corresponding to 52 human secreted protein genes, and AAB87342-AAB7413 represent the proteins they encode.	CC

381
④ ⑬ ⑮

GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.

OM nucleic - nucleic search, using sw model.
Run on: June 20, 2003, 20:42:18 ; Search time 488.851 Seconds

(without alignments)
5466.401 Million cell updates/sec

Title: US-09-964-824C-381
Perfect score: 165
Sequence: 1 ctctttgagtaactttttt.....caaagtttagatatttag 165

Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 1.0

Searched: 16154066 seqs, 8097743376 residues

Total number of hits satisfying chosen parameters: 32308132

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : EST:*

1: em.estba:*

2: em.esthum:*

3: em.estin:*

4: em.estmu:*

5: em.estov:*

6: em.estpl:*

7: em.estro:*

8: em.htc:*

9: gb.estl:*

10: gb.est2:*

11: gb.htc:*

12: gb.est3:*

13: qb.est4:*

14: qb.est5:*

15: em.estfun:*

16: em.estom:*

17: qb.gss:*

18: em.gss_hum:*

19: em.gss_inv:*

20: em.gss_Pln:*

21: em.gss_vrt:*

22: em.gss_fun:*

23: em.gss_mam:*

24: em.gss_mus:*

25: em.gss_other:*

26: em.gss_pro:*

27: em.gss_rid:*

ALIGNMENTS

RESULT	1
LOCUS	N73808
DEFINITION	165 bp mRNA linear EST 19-MAR-1995
clone IMAGE:289404 3', mRNA sequence.	
ACCESSION	N73808
VERSION	N73808.1 GI:1231093
KEYWORDS	EST
SOURCE	human.
ORGANISM	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarinini; Hominoidea; Homo.
REFERENCE	1 (bases 1 to 165)
AUTHORS	Hillier,L., Clark,N., Dubique,T., Elliston,K., Hawkins,M., Holman,M., Holtzman,M., Kucaba,T., Le,M., Lennon,G., Marr,M., Parsons,J., Rikitin,L., Rohlfing,T., Sorees,M., Tann,F., Trevaskis,E., Waterston,R., Williamson,A., Wohldmann,P. and Wilson,R.
TITLE	The WashU-Merck EST Project
JOURNAL	Unpublished (1995)
COMMENT	Contact: Wilson RK
Washington University School of Medicine	
4444 Forest Park Parkway, Box 8301, St. Louis, MO 63108	
Tel: 314 286 1800	
Fax: 314 286 1810	
Email: est@atson.wustl.edu	
This clone is available royalty-free through IUNL ; contact the IMAGE Consortium (info@image.Inl.gov) for further information.	
Seq primer: ml3 -40 forward	
High quality sequence stop: 144.	

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
1	165	100.0	165 14 N73808	N73808 yz80907.s1
2	165	100.0	213 9 A1699181	A1699181 tx61a11.x
3	165	100.0	282 14 R50866	R50866 yg62hb8.s1
4	165	100.0	302 9 A1910763	A1910763 wq96b11.x
5	165	100.0	303 9 A1969490	A1969490 wz67f01.x
6	165	100.0	356 9 A1351615	A1351615 qr07f12.x

FEATURES		High quality sequence stop: 200.	
FEATURES	Source	Location/Qualifiers	
/organism="Homo sapiens"		Location/Qualifiers	
/db_xref="GDB:3905244"		1. .213	
/clone="IMAGE:89404"		/organism="Homo sapiens"	
/clone_libr="NCICGAP Util"		/db_xref="taxon:9606"	
/sex="male"		/clone_libr="IMAGE:2274092"	
/tissue_type="multiple sclerosis lesions"		/tissue_type="well-differentiated endometrial adenocarcinoma, 7 pooled tumors"	
/dev_stage="Age 46"		/lab_host="DH10B"	
/note="vector: pMT3D (Pharmacia) with a modified polylinker V-type; plasmid; Site_1: Not I; Site_2: Eco RI; 1st strand cDNA was primed with a Not I - oligo(dT) primer [5' TGTATCCAACCTGAAGTGGAGGGCCATTTTTTTTTTTTTT 3'], double-stranded cDNA was size selected, ligated to Eco RI adapters (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of a modified pMT3 vector (Pharmacia). Library constructed by Bento Soares and M. Fatima Bonaldo. RNA from 4 multiple sclerosis lesions from one patient was kindly provided by Dr. Kevin G. Becker (NINDS/NIH)."	/note="Organ: uterus; Vector: pcMV-SPORT6; Site_1: SalI; Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT. Average insert size 1.75 kb. Life Technologies catalog #: N153-014"		
BASE COUNT	68 a 22 c 23 g 52 t	BASE COUNT	
ORIGIN		ORIGIN	
Query Match		Query Match	
Best Local Similarity	100.0%	Score 165; DB 14; length 165;	
Matches	165; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	Best Local Similarity 100.0%; Pred. No. 1; 5e-21; Mismatches 0; Ingels 0; Gaps 0;	
QY	1 CTCCTTGAGTAACTTATTGGAGACTTCATAAGCATACATAAAAGCA 60	QY	1 CTCCTTGAGTAACTTATTGGAGACTTCATAAGCATACATAAAATGA 60
OY	1 CTCTTGAGTAACTTATTGGAGACTTCATAAGCATACATAAAAGCA 60	Db	4 CTCTTGAGTAACTTATTGGAGGAGTCATAAGCATACATAAAATGA 63
Db	1 AAAAATGATGTTAGTAAACAAAAACAGCATGATTTAACATTAATGAA 60	QY	61 CACACCACTGTGACATGAAAAAAACAGCATGATTTAACATTAATGTT 120
OY	61 CACACCACTGTGACATGAAAAAAACAGCATGATTTAACATTAATGTT 120	Db	64 CACACCACTGTGACATGAAAAAAACAGCATGATTTAACATTAATGTT 123
Db	121 AAAAATGATGTTAGTAAACAAAAACAGCATGATTTAACATTAATGTT 120	QY	121 AAAAATGATGTTAGTAAACAAAAACAGCATGATTTAACATTAATGTT 123
OY	121 AAAAATGATGTTAGTAAACAAAAACAGCATGATTTAACATTAATGTT 120	Db	124 AAAAATGATGTTAGTAAACAAAAACAGCATGATTTAACATTAATGTT 168
Db	121 AAAAATGATGTTAGTAAACAAAAACAGCATGATTTAACATTAATGTT 165	RESULT 3	
RESULT	2	RESULT	3
A1699181		R50866	R50866
LOCUS	A1699181	50866	50866
DEFINITION	tx61ell.x1 NCI_CGAP_Util Homo sapiens cDNA clone IMAGE:2274092 3', mRNA sequence.	DEFINITION	Y962h08.s1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:37566 3', mRNA sequence.
ACCESSION	A1699181	VERSION	R50866
KEYWORD	EST	KEYWORDS	R50865.1 GI:812768
SOURCE		SOURCE	EST.
ORGANISM	Homo sapiens	ORGANISM	Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.		Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.	
REFERENCE	1 (bases 1 to 282)	REFERENCE	1 (bases 1 to 282)
AUTHORS	Hillier,L., Clark,N., Dubuque,T., Elliston,K., Hawkins,M., Holman,M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marra,M., Parsons,J., Rikard,L., Rohlfing,T., Soares,M., Tan,F., Trevaskis,E., Waterston,R., Williamson,A., Wohldmann,P. and Wilson,R.	AUTHORS	Hillier,L., Clark,N., Dubuque,T., Elliston,K., Hawkins,M., Holman,M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marra,M., Parsons,J., Rikard,L., Rohlfing,T., Soares,M., Tan,F., Trevaskis,E., Waterston,R., Williamson,A., Wohldmann,P. and Wilson,R.
TITLE	The WashU-Merck EST Project	JOURNAL	The WashU-Merck EST Project
COMMENT	Unpublished (1995)	COMMENT	Unpublished (1995)
FEATURES		FEATURES	
source		source	
REFERENCE	1 (bases 1 to 213)	1. .282	/organism="Homo sapiens"
AUTHORS	NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.	/db_xref="GDB:410107"	/clone="IMAGE:37566"
TITLE	National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index	/clone_libr="Soares infant brain 1NIB"	/clone_libr="Soares infant brain 1NIB"
JOURNAL	Unpublished (1997)	Insert Size:	1925
COMMENT	Contact: Robert Strausberg, Ph.D. Email: cgabps1@mail.nih.gov	High quality sequence stops: 251 Source: IMAGE Consortium, LLNL	This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
DNA Sequencing by: Washington University Genome Sequencing Center	Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R. Empert-Duck, M.D., Ph.D.	Insert Length:	1925 Std Error: 0.00
Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: www-bio.llnl.gov/abrp/image/image.html	CDNA Library Preparation: Life Technologies, Inc.	Seq Primer:	Promega -21m13
Insert Length:	2085	High quality sequence stop:	251.
Seq Primer:	-40UP from Gibco	Location/Qualifiers	

```

/sex="female"
/dev_stages="73 days post natal"
/lab_host="DH10B (ampicillin resistant)"
/note="Organ: whole brain; Vector: Lafmid BA; Site_1: Not I; Site_2: Hind III; 1st strand cDNA was primed with a Not I - oligo(dT) primer [5].
ACTCTGAAAGATTCGGGCCGAGATTTTTTTTTTTT 3'];
double-stranded cDNA was ligated to Hind III adaptors
(Pharmacia), digested with Not I and directionally cloned
into the Not I and Hind III sites of the Lafmid BA vector.
Library went through one round of normalization. Library
constructed by Bento Soares and M. Fatima Bonaldo."
```

BASE COUNT	101 a	43 c	40 g	96 t	2 others
ORIGIN					

RESULT 4

ACCESSION	A1910763	LOCUS	AI910763	DEFINITION	wg9611.x1 NCI_CGAP_Kid11	VERSION	302 bp mRNA	DEFINITION	linear EST	IMAGE:23/9141/3,
REFERENCE		ACCESION		VERSION	mRNA sequence.	KEYWORDS		ACCESION		IMAGE:23/9141/3,
AUTHORS		REFERENCE		VERSION		KEYWORDS		REFERENCE		
TITLE		AUTHORS		VERSION		KEYWORDS		AUTHORS		
human.		TITLE		VERSION		KEYWORDS		TITLE		
JOURNAL		JOURNAL		VERSION		KEYWORDS		JOURNAL		
COMMENT		COMMENT		VERSION		KEYWORDS		COMMENT		
Email: cgabs_r@mail.nih.gov		Email: cgabs_r@mail.nih.gov		VERSION		KEYWORDS		Email: cgabs_r@mail.nih.gov		
Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R. Emmert-Buck, M.D., Ph.D.		Tissue Procurement: Chris Moskaluk, M.D., Ph.D., Michael R. Emmert-Buck, M.D., Ph.D.		VERSION		KEYWORDS		Tissue Procurement: Chris Moskaluk, M.D., Ph.D., Michael R. Emmert-Buck, M.D., Ph.D.		
cDNA library Preparation: M. Bento Soares, Ph.D.		cDNA library Preparation: M. Bento Soares, Ph.D.		VERSION		KEYWORDS		cDNA library Preparation: M. Bento Soares, Ph.D.		
CDNA library Arrayed by: Greg Lennon, Ph.D.		CDNA library Arrayed by: Greg Lennon, Ph.D.		VERSION		KEYWORDS		CDNA library Arrayed by: Greg Lennon, Ph.D.		
Genome Sequencing by: Washington University Genome Sequencing Center		Genome Sequencing by: Washington University Genome Sequencing Center		VERSION		KEYWORDS		Genome Sequencing by: Washington University Genome Sequencing Center		
Clone distribution: NCI_CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LN1L at: www.bio.llnl.gov/bop/image/image.html		Clone distribution: NCI_CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LN1L at: www.bio.llnl.gov/bop/image/image.html		VERSION		KEYWORDS		Clone distribution: NCI_CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LN1L at: www.bio.llnl.gov/bop/image/image.html		
Insert Length: 1427 Std Error: 0.00		Insert Length: 1427 Std Error: 0.00		VERSION		KEYWORDS		Insert Length: 1427 Std Error: 0.00		
Seq Primer: <400P from Gibco		Seq Primer: <400P from Gibco		VERSION		KEYWORDS		Seq Primer: <400P from Gibco		
High quality sequence stop: 297.		High quality sequence stop: 297.		VERSION		KEYWORDS		High quality sequence stop: 297.		
FEATURES		FEATURES		VERSION		KEYWORDS		FEATURES		
source		source		VERSION		KEYWORDS		source		
/organism="Homo sapiens"		/organism="Homo sapiens"		VERSION		KEYWORDS		/organism="Homo sapiens"		
/db_xref="taxon:9606"		/db_xref="taxon:9606"		VERSION		KEYWORDS		/db_xref="taxon:9606"		
/clone="IMAGE:2379111"		/clone="IMAGE:2379111"		VERSION		KEYWORDS		/clone="IMAGE:2379111"		
/clone_libr="NCI_CGAP_Kid11"		/clone_libr="NCI_CGAP_Kid11"		VERSION		KEYWORDS		/clone_libr="NCI_CGAP_Kid11"		
/lab_host="DH10B"		/lab_host="DH10B"		VERSION		KEYWORDS		/lab_host="DH10B"		
a modified polylinker; Site_1: Not I; Site_2: Eco RI;		a modified polylinker; Site_1: Not I; Site_2: Eco RI;		VERSION		KEYWORDS		a modified polylinker; Site_1: Not I; Site_2: Eco RI;		
Plasmid DNA from the normalized library NCI_CGAP_Kid3 was prepared, and ss circles were made in vitro. Following HAP		Plasmid DNA from the normalized library NCI_CGAP_Kid3 was prepared, and ss circles were made in vitro. Following HAP		VERSION		KEYWORDS		Plasmid DNA from the normalized library NCI_CGAP_Kid3 was prepared, and ss circles were made in vitro. Following HAP		

Purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from a pool of 5,000 clones made from the same library (clones 132376-123911, 1456007-1456775, and 150552-1502855). Subtraction by Bento Soares and M. Fatima Bonaldo.

BASE COUNT	113 a	49 c	44 g	96 t
ORIGIN				

RESULT 5

ACCESSION	A1969490	LOCUS	AI969490	DEFINITION	wz6701.x1 NCI_CGAP_Mell15	VERSION	303 bp mRNA	DEFINITION	mRNA	linear EST	IMAGE:25/3129/3,
REFERENCE		ACCESSION		VERSION	mRNA sequence.	KEYWORDS		REFERENCE		IMAGE:25/3129/3,	
AUTHORS		REFERENCE		VERSION		KEYWORDS		AUTHORS			
TITLE		AUTHORS		VERSION		KEYWORDS		TITLE			
human.		TITLE		VERSION		KEYWORDS		JOURNAL			
JOURNAL		JOURNAL		VERSION		KEYWORDS		COMMENT			
COMMENT		COMMENT		VERSION		KEYWORDS		COMMENT			
Email: cgabs_r@mail.nih.gov		Email: cgabs_r@mail.nih.gov		VERSION		KEYWORDS		Email: cgabs_r@mail.nih.gov			
Tissue Procurement: Chris Moskaluk, M.D., Ph.D., Michael R. Emmert-Buck, M.D., Ph.D.		Tissue Procurement: Chris Moskaluk, M.D., Ph.D., Michael R. Emmert-Buck, M.D., Ph.D.		VERSION		KEYWORDS		Tissue Procurement: Chris Moskaluk, M.D., Ph.D., Michael R. Emmert-Buck, M.D., Ph.D.			
Emmert-Buck, M.D., Ph.D.		Emmert-Buck, M.D., Ph.D.		VERSION		KEYWORDS		Emmert-Buck, M.D., Ph.D.			
Technologies, Inc. CDNA Library Arrayed by: Christa Prange, The Tumor Gene Index		Technologies, Inc. CDNA Library Arrayed by: Christa Prange, The Tumor Gene Index		VERSION		KEYWORDS		Technologies, Inc. CDNA Library Arrayed by: Christa Prange, The Tumor Gene Index			
Unpublished (1997)		Unpublished (1997)		VERSION		KEYWORDS		Unpublished (1997)			
Contact: Robert Strausberg, Ph.D.		Contact: Robert Strausberg, Ph.D.		VERSION		KEYWORDS		Contact: Robert Strausberg, Ph.D.			
Email: cgabs_r@mail.nih.gov		Email: cgabs_r@mail.nih.gov		VERSION		KEYWORDS		Email: cgabs_r@mail.nih.gov			
Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R. Emmert-Buck, M.D., Ph.D.		Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R. Emmert-Buck, M.D., Ph.D.		VERSION		KEYWORDS		Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R. Emmert-Buck, M.D., Ph.D.			
Emmert-Buck, M.D., Ph.D.		Emmert-Buck, M.D., Ph.D.		VERSION		KEYWORDS		Emmert-Buck, M.D., Ph.D.			
Genome Sequencing by: Washington University Genome Sequencing Center		Genome Sequencing by: Washington University Genome Sequencing Center		VERSION		KEYWORDS		Genome Sequencing by: Washington University Genome Sequencing Center			
Clone distribution: NCI_CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LN1L at: www.bio.llnl.gov/bop/image/image.html		Clone distribution: NCI_CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LN1L at: www.bio.llnl.gov/bop/image/image.html		VERSION		KEYWORDS		Clone distribution: NCI_CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LN1L at: www.bio.llnl.gov/bop/image/image.html			
Insert Length: 479 Std Error: 0.00		Insert Length: 479 Std Error: 0.00		VERSION		KEYWORDS		Insert Length: 479 Std Error: 0.00			
Seq Primer: <400P from Gibco.		Seq Primer: <400P from Gibco.		VERSION		KEYWORDS		Seq Primer: <400P from Gibco.			
location/qualifiers		location/qualifiers		VERSION		KEYWORDS		location/qualifiers			
1..302		1..303		VERSION		KEYWORDS		1..303			
/FEATURES		/FEATURES		VERSION		KEYWORDS		/FEATURES			
source		source		VERSION		KEYWORDS		source			
/organism="Homo sapiens"		/organism="Homo sapiens"		VERSION		KEYWORDS		/organism="Homo sapiens"			
/db_xref="taxon:9606"		/db_xref="taxon:9606"		VERSION		KEYWORDS		/db_xref="taxon:9606"			
/clone="IMAGE:2563129"		/clone="IMAGE:2563129"		VERSION		KEYWORDS		/clone="IMAGE:2563129"			
/clone_libr="NCI_CGAP_Mell15"		/clone_libr="NCI_CGAP_Mell15"		VERSION		KEYWORDS		/clone_libr="NCI_CGAP_Mell15"			
/tissue_type="malignant melanoma, metastatic to lymph node"		/tissue_type="malignant melanoma, metastatic to lymph node"		VERSION		KEYWORDS		/tissue_type="malignant melanoma, metastatic to lymph node"			
/lab_host="DH10B"		/lab_host="DH10B"		VERSION		KEYWORDS		/lab_host="DH10B"			
a note="Organ: kidney; Vector: pIT7T3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI;"		a note="Organ: kidney; Vector: pIT7T3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI;"		VERSION		KEYWORDS		a note="Organ: kidney; Vector: pIT7T3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI;"			
Plasmid DNA from the normalized library NCI_CGAP_Kid3 was prepared, and ss circles were made in vitro. Following HAP		Plasmid DNA from the normalized library NCI_CGAP_Kid3 was prepared, and ss circles were made in vitro. Following HAP		VERSION		KEYWORDS		Plasmid DNA from the normalized library NCI_CGAP_Kid3 was prepared, and ss circles were made in vitro. Following HAP			

DEFINITION	Y18e01.S1 3', mRNA sequence.
IMAGE	44945 3', mRNA sequence.
ACCESSION	H08164
VERSION	EST
SOURCE	Homo sapiens
ORGANISM	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homindae; Homo.
REFERENCE	1 (bases 1 to 423)
AUTHORS	Hillier,L., Clark,N., Dubuque,T., Ellison,K., Hawkins,M., Holman,R., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marra,M., Parsons,J., Rikin,L., Ronning,C., Soares,M., Tan,F., Trevaskis,E., Waterston,R., Williamson,A., Wohldmann,P., and Wilson,R.
TITLE	The WashU-Merck EST Project
JOURNAL	Unpublished (1995)
COMMENT	Contact: Wilson RK
FEATURES	source
source	Washington University School of Medicine 4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108 Tel: 314 286 1800 Fax: 314 286 1810 Email: est@wuston.wustl.edu
High quality sequence stops:	337
High quality sequence stop:	337
Location/Qualifiers	
	1. . 412
/organism="Homo sapiens"	
/db_xref="GDB:17486"	
/db_xref="taxon:9606"	
/clone="IMAGE:44945"	
/clone_lib="Soares infant brain LNIB"	
/sex="female"	
/dev_stage="73 days post natal"	
/lab_host="DH10B (ampicillin resistant)"	
/note="Organ: whole brain; Vector: Lafmid BA; Site:1: Not I; Site:2: Hind III; 1st strand cDNA was primed with a Not I - oligo(dT) primer [5]; AACTGGAAATTCCGGCCAGGAATTTTTTTTTT 3'; double-stranded cDNA was ligated to Hind III adaptors (Pharmacia), digested with Not I and directionally cloned into the Not I and Hind III sites of the Lafmid BA vector. Library went through one round of normalization. Library constructed by Bento Soares and M. Fatima Bonaldo."	
BASE COUNT	a 143 a 65 c 139 t 1 others
ORIGIN	
Query Match	100.0%; Score 165; DB 14; Length 412;
Best Local Similarity	100.0%; Pred. No. 1 1e-21;
Matches	165; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	1 CTCCTTAGTAAGTTATTGAGGAGTTCCAATAGCATTAGAACATACATAAATGA 60
Db	14 CTCTTGAGTAGACTTATTGAGGAGTCCATAGCATAGGACATACATAAATGA 73
QY	61 CACACCACTGTGACATGAAAAAAACACGATTTCCAGCTTTAGT 120
Db	74 CACACCACTGTGACATGAAAAAAACACGATTTCCAGCTTTAGT 133
QY	121 AAAAATGATTGAGTAAAGAAACAAAGTTAGATTTAG 165
Db	134 AAAAATGATTGAGTAAACAAACAAAGTTAGATTTAG 178
RESULT	9
A1049699	AW592865
LOCUS	AW592865
DEFINITION	h94b07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2944597 3', mRNA sequence.
ACCESSION	AM592865
VERSION	AM592865.1
KEYWORDS	EST.
SOURCE	Homo sapiens
ORGANISM	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homindae; Homo.
REFERENCE	1 (bases 1 to 423)
AUTHORS	Hillier,L., Allen,M., Bowles,L., Dubuque,T., Geisel,G., Jost,S., Krizman,D., Kucaba,T., Lacy,M., Le,N., Lennon,G., Marra,M., Martin,J., Moore,B., Schellenberg,K., Steptoe,M., Tan,F., Theisinger,B., White,Y., Wilie,T., Waterston,R. and Wilson,R.
TITLE	WashU-NCI human EST Project
JOURNAL	Unpublished (1997)
COMMENT	Contact: Wilson RK
FEATURES	source
source	Washington University School of Medicine 4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108 Tel: 314 286 1800 Fax: 314 286 1810 Email: est@wuston.wustl.edu
This clone is available royalty-free through LNIB ; contact the IMAGE Consortium (info@image.lnl.gov) for further information.	
Seq primer: Promega -21m13	
Location/Qualifiers	
	1. . 423
/organism="Homo sapiens"	
/db_xref="taxon:9606"	
/clone="IMAGE:1700465"	
/clone_lib="Gessler Wilms tumor"	
/sex="pooled (6)"	
/lab_host="DH10B"	
/note="Vector: pSPORT1; Site:1: Sall; Site:2: NotI; RNA was prepared from a pool of 6 anonymous Wilms tumor RNAs. RNA was prepared by acid-phenol, followed by one round of oligo dT selection. cDNA library preparation was with the BRL/Life Tech. Superscript plasmid system. An oligo-dT NotI primer for first strand synthesis generated ggccgcgcctt at the 3' end of the clones. A 5' Sall adapter was used with sequence 5'-gtccacccgcgcgcg-3'. Resulting cDNAs were size selected (average size 2 kb), NotI digested and ligated into NotI/Sall-cut pSPORT1. Library was constructed by Dr. Manfred Gessler."	
BASE COUNT	a 155 a 65 c 60 g 143 t
ORIGIN	
Query Match	100.0%; Score 165; DB 9; Length 423;
Best Local Similarity	100.0%; Pred. No. 1 1e-21;
Matches	165; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	1 CTCTTGAGTAGACTTATTGAGGAGTCCATAGCATAGGACATACATAAATGA 60
Db	14 CTCTTGAGTAGACTTATTGAGGAGTCCATAGCATAGGACATACATAAATGA 73
QY	61 CACACCACTGTGACATGAAAAAAACACGATTTCCAGCTTTAGT 120
Db	74 CACACCACTGTGACATGAAAAAAACACGATTTCCAGCTTTAGT 133
QY	121 AAAAATGATTGAGTAAAGAAACAAAGTTAGATTTAG 165
Db	134 AAAAATGATTGAGTAAACAAACAAAGTTAGATTTAG 178
RESULT	10
A1049699	AW592865
LOCUS	AW592865
DEFINITION	h94b07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2944597 3', mRNA sequence.
ACCESSION	AM592865
VERSION	AM592865.1
KEYWORDS	EST.
SOURCE	Homo sapiens
ORGANISM	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homindae; Homo.

REFERENCE	1 (bases 1 to 423)	FEATURES	High quality sequence stop: 411.	
AUTHORS	National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index	source	Location/Qualifiers L..444	
TITLE	Unpublished (1997)		/organism="Homo sapiens"	
JOURNAL	Contact: Robert Strausberg, Ph.D.		/db_xref="taxon:9606"	
COMMENT	Email: cgaps-r@mail.nih.gov		/clone="IMAGE:1660379"	
	This clone is available royalty-free through LILN ; contact the IMAGE Consortium (info@image.llnl.gov) for further information.		/clone_lib="Soares_NHMPU_SI"	
	Seq primer: -40UP from Gibco		/lab_host="DH10B"	
	High quality sequence stop: 209.		/note="Organ: pooled; Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; Equal amounts of plasmid DNA from three normalized libraries (fetal lung NBH19W, testis NMII, and B cell NCI CGAP GCB1) were mixed, and ss circles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from pools of 5,000 clones made from the same 3 libraries. The pools consisted of I.M.A.G.E. clones 297480-302087, 682631-687239, 729056-731399. Subtraction by Bento Soares and M. Fatima Bonaldo."	Location/Qualifiers L..423
FEATURES	source		/organism="Homo sapiens"	
			/db_xref="taxon:9606"	
			/clone="IMAGE:2944597"	
			/clone_lib="SoaresNFLT_GBC_SI"	
			/lab_host="DH10B"	
			/note="Organ: mixed (see below); Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; Equal amounts of plasmid DNA from three normalized libraries (melanocyte NBH19W, pregnant uterus NBH10, and fetal heart NBH19W) were mixed, and ss circles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from pools of 5,000 clones made from the same 3 libraries. The pools consisted of I.M.A.G.E. clones 260232-265223, 340488-345479, and 484488-489479."	Location/Qualifiers L..423
BASE COUNT	157	ORIGIN	a 66 c 63 g 137 t	
BASE COUNT	166	ORIGIN	a 69 c 71 g 138 t	
RESULT 11		Query Match	100 %; Score 165; DB 10; Length 423;	
AT041596		Best Local Similarity	100 %; Pred. No. 1.1e-21;	
LOCUS	A1041596	Matches	165; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
DEFINITION	444 bp mRNA linear EST 24-SEP-1998	QY	1 CTCCTGAGTACTTTGGAGGAGTCATAAGCATAGGAACATACATAAATGA 60	
3', mRNA sequence.	ox56h06.x1 Soares-NHMPU_SI Homo sapiens cDNA clone IMAGE:1660379	Db	6 CTCTTGTGAGTACTTTGGAGGAGTCATAAGCATAGGAACATACATAAATGA 65	
ACCESSION	A1041596	QY	61 CACACCACTGTGACATGAAACAAAAACAGCATTTGCAGCTTTAGTT 120	
VERSION	A1041596.1	Db	66 CACCCACTGTGACATGAAACAAAAACAGCATTTGCAGCTTTAGTT 125	
KEYWORDS	EST.	QY	121 AAAAATGATTGAGTAAACACAAACAAAGTTAGATTTAG 165	
EST.		Db	126 AAAAATGATTGAGTAAACACAAACAAAGTTAGATTTAG 170	
RESULT 12		Query Match	100 %; Score 165; DB 9; Length 444;	
AT041596		Best Local Similarity	100 %; Pred. No. 1.1e-21;	
LOCUS	A1041596	Matches	165; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
DEFINITION	450 bp mRNA linear EST 20-OCT-2000	QY	61 CACACCACTGTGACATGAAACAAAAACAGCATTTGCAGCTTTAGTT 120	
3', mRNA sequence.	xa05607.x1 SoaresNFLT_GBC_SI Homo sapiens cDNA clone IMAGE:2567533	Db	64 CACACCACTGTGACATGAAACAAAAACAGCATTTGCAGCTTTAGTT 123	
ACCESSION	A1041596	QY	121 AAAAATGATTGAGTAAACACAAACAAAGTTAGATTTAG 165	
VERSION	A1041596.1	Db	124 AAAAATGATTGAGTAAACACAAACAAAGTTAGATTTAG 168	
KEYWORDS	EST.	SOURCE	human.	
		ORGANISM	Homo sapiens	
			Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.	
REFERENCE	1 (bases 1 to 450)	AUTHORS	NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.	
AUTHORS		TITLE	National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index	
JOURNAL	Unpublished (1997)	COMMENT	Contact: Robert Strausberg, Ph.D.	
COMMENT			Email: cgaps-r@mail.nih.gov	
JOURNAL			This clone is available royalty-free through LILN ; contact the IMAGE Consortium (info@image.llnl.gov) for further information.	
			Insert Length: 1130 Std Error: 0.00	
			Seq primer: -40UP from Gibco	
			High quality sequence stop: 447.	
FEATURES	source		Location/Qualifiers L..450	
			/organism="Homo sapiens"	
			/db_xref="taxon:9606"	
			/clone="IMAGE:2567533"	
			/clone_lib="SoaresNFLT_GBC_SI"	
			/lab_host="DH10B"	
			/note="Organ: pooled; Vector: pT7T3D-Pac (Pharmacia) with	

Page 7

Equal amounts of plasmid DNA from three normalized libraries (fetal lung NBHL19W, testis NHT, and B-cell NCL CGAP_GCB) were mixed, and ss circles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from pools of 5,000 clones made from the same 3 libraries. The pools consisted of I.M.A.G.E. clones 297480-342087, 682632-667239, 726408-728711, and 728096-731399. Subtraction by Bento Soares and M. Fatima Bonaldo.

```

    Best Local Similarity 100 %; Score 165.; DB 10; Length 450;
    Matches 165; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

Query	Match	100 %;	Score	DB 9;	Length
Best Local Similarity	100 %;	Pred. No.	1.e-21;		
Matches 165;	Conservative 0;	Mismatches	0;	Indels	0;
OY					
1	CCTCTTGAGTAACTTTATTGGAGGAGTTCATAAGCATAGAACATACATAAATGA	60			
Db					
9	CTCTTGTAGTAACTTTATTGGAGGAGTTCATAAGCATAGAACATACATAAATGA	68			
QY					
61	CACACCACTGTGACATGAAAAAAACAGCATTTGATATTCCAGCTTTAGTT	120			
Db					
69	CACACCACTGTGACATGAAAAAAACAGCATTTCCAGCTTTAGTT	128			
QY					
121	AAAAATGATTCAGTAAACAAACAAAGTTAGATATTAG	165			
Db					
129	AAAAATGATTCAGTAAACAAACAAAGTTAGATATTAG	173			

QY	4	CCTCTTGAGTACTTTATTGGAGGTTCCATAAGCATAGAACATACATAAATGA	60	RESULT 14
Db	61	CACACCACTGTGACATGAAACAGCATTGTGATATTTCAGCTTTAAGTT	120	AW770384
QY	64	CACACCACTGTGACATGAAACAGCATTGTGATATTTCAGCTTTAAGTT	123	h180d9 x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3007505 3'', mRNA sequence.
Db	121	AAAATGATTCAGTAAACAAACAAAGTTAGATATTAG	165	AW770384
QY	124	AAAATGATTCAGTAAACAAACAAAGTTAGATATTAG	168	AW770384.1 GI:7702426 EST.
LOCUS	A1573107	451 bp mRNA linear EST 14-MAY-1999	459 bp mRNA linear EST 04-MAY-2000	EST.
DEFINITION	tr69f01.x1 NCI_CGAP_Pan1	Homo sapiens cDNA clone IMAGE:223577 3'', mRNA sequence.	mRNA sequence.	EST.
ACCESSION	A1573107			
VERSION				
KEYWORDS				
SOURCE				
ORGANISM	Homo sapiens	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homidae; Homo. human.	Organism	
REFERENCE	EST.			
AUTHORS	1 (bases 1 to 451)	(bases 1 to 459)		
TITLE	NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.	NCI-CGAP		
JOURNAL	National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index	National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index		
COMMENT	Unpublished (1997)	Unpublished (1997)		
CONTACT	Robert Strausberg, Ph.D.	Contact: Robert Strausberg, Ph.D.		
FEATURES	source	Email: cgaps-r@mail.nih.gov		
FEATURES	source	Life Technologies catalog #: 11548-013		
FEATURES	source	DNA Sequencing by: Washington University Genome Sequencing Center		
FEATURES	source	Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at: www-bio1.lnl.gov/bnbr/image/image.html		
FEATURES	source	Insert length: 3468 Std Error: 0.00		
FEATURES	source	Seq primer: -40UP from Gibco		
FEATURES	source	High quality sequence stop: 415.		
FEATURES	source	Location/Qualifiers		
FEATURES	source	1. .459 /organism="Homo sapiens"		
FEATURES	source	/db_xref="taxon:9606"		
FEATURES	source	/clone="IMAGE:3007505"		
FEATURES	source	/clone_id="NCI_CGAP_Kid13"		
FEATURES	source	/tissue_type="2 pooled Wilms' tumors, one primary and one metastatic to brain"		
FEATURES	source	/lab_host="DHIOB"		
FEATURES	source	/note="Organ: kidney; vector: pCMV-SPORT6; Site_1: SalI; Site_2: NotI; Cloned unidirectionally. Primer: Oligo dN.		
FEATURES	source	Library constructed by Life Technologies."		
FEATURES	source			
BASE COUNT	173	a 71 c 73 g	142 t	
ORIGIN				
Query	Match	100.0%	Score 165, DB 10;	
Best	Local Similarity	100.0%	Pred. No. 1.1e-21;	
Matches	Conservative	0;	Mismatches 0;	
	Indels	0;	Gaps 0;	
QY	1	CCTCTTGAGTACTTTATTGGAGGTTCCATAAGCATAGAACATACATAAATGA	60	AW770384
Db	6	CCTCTTGAGTACTTTATTGGAGGTTCCATAAGCATAGAACATACATAAATGA	65	h180d9 x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3007505 3'', mRNA sequence.
QY	61	CACACCACTGTGACATGAAACAGCATTGTGATATTTCAGCTTTAAGTT	120	AW770384
Db	66	CACACCACTGTGACATGAAACAGCATTGTGATATTTCAGCTTTAAGTT	125	AW770384.1 GI:7702426 EST.
BASE COUNT	169	a 71 c 70 g 141 t		
ORIGIN				

QY 121 AAAAATGATCAGTTAACACAAACAAAGTTAGATTTAG 165
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db AA479302 AA479302 462 bp mRNA linear EST 08-AUG-1997
 LOCUS zv21f08_s1 Soares_NhHMPu_S1 Homo sapiens cDNA clone IMAGE:754311
 DEFINITION 3', mRNA sequence.
 ACCESSION AA479302
 VERSION AA479302.1 GI:2207858
 KEYWORDS EST.
 SOURCE human.
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrini; Hominoidea; Homo.
 REFERENCE I (bases 1 to 462)
 Hillier,L., Allen,M., Bowles,L., Dubroque,T., Geisel,G., Jost,S.,
 Kucaba,T., Lacy,M., Le,N., Lennon,G., Marr,M., Martin,J., Moore,B.,
 Schellenberg,K., Septeau,M., Tan,F., Theising,B., White,Y., Wylie,
 T., Waterston,R. and Wilson,R.
 TITLE WashU-Merck EST Project 1997
 JOURNAL Unpublished (1997)
 COMMENT Contact: Wilson RK
 Washington University School of Medicine
 4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
 Tel: 314 286 1800
 Fax: 314 286 1810
 Email: est@atson.wustl.edu
 This clone is available royalty-free through UINL ; contact the
 IMAGE Consortium (info@image.jnl.gov) for further information.
 Seq primer: -4ml3 fd; ER from Amersham
 High quality sequence stop: 455.

FEATURES
 source
 1..462
 /organism="Homo sapiens"
 /db_xref="GB:597197"
 /db_xref="ttxon:9606"
 /clone="IMAB:754311"
 /clone_id="Soares_NhHMPu_S1"
 /tissue_type="Pooled human melanocyte, fetal heart, and
 pregnant uterus"
 /lab_host="DH110B"
 /note="Organ: mixed (see below); vector: pRT3D-Pac
 (Pharmacia) With a modified polylinker; Site_1: Not I;
 Site_2: Eco RI; Equal amounts of Plasmid DNA from three
 normalized libraries (melanocyte 2NbHM, pregnant uterus
 NbHU, and fetal heart NbHH19W) were mixed, and ss circles
 were made in vitro. Following HAP purification, this DNA
 was used as tracer in a subtractive hybridization
 reaction. The driver was PCR-amplified cDNAs from pools of
 5,000 clones made from the same 3 libraries. The pools
 consisted of 1.M.A.G.E. clones 260232-265223,
 310488-345479, and 484488-489479."
 BASE COUNT
 176 a 70 c 75 g 141 t
 ORIGIN

Db 121 AAAAATGATCAGTTAACACAAACAAAGTTAGATTTAG 165
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Search completed: June 21, 2003, 03:38:08
 Job time : 496.851 secs

QY 1 CTCTTGTGACTAACTTTATTGGAGGACTCCATAGCATACATAAAGGA 60
 Db 1 CTCTTGTGACTAACTTTATTGGAGGACTCCATAGCATACATAAAGGA 60
 QY 61 CACACCACTGTTGACATGTTAACAAAAACACAGCATTTGATTTCCACGTTTAAGT 120
 61 CACACCACTGTTGACATGTTAACAAAAACACAGCATTTGATTTCCACGTTTAAGT 120
 QY 121 AAAAATGATGTTAACACAAACAAAGTTAGATTTAG 165
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

ALIGNMENTS

RESULT 1
ABL67356
ID ABL67356 standard; DNA; 386 BP.
XX
AC ABL67356;
XX
DT 15-MAY-2002 (first entry)
XX
DE Thyroid cancer related gene sequence SEQ ID NO:5693.
XX
KW Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
KW stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
KW cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
KW gene; ds.
XX
OS Homo sapiens.
XX
PN WO200194629-A2.
XX
PD 13-DEC-2001.
XX
PF 30-MAY-2001; 2001WO-US10838.
XX
PR 05-JUN-2000; 2000US-209473P.
PR 05-JUN-2000; 2000US-209531P.
PR 18-SEP-2000; 2000US-233133P.
PR 18-SEP-2000; 2000US-233617P.
PR 20-SEP-2000; 2000US-234009P.
PR 20-SEP-2000; 2000US-234034P.
PR 20-SEP-2000; 2000US-234052P.
PR 22-SEP-2000; 2000US-234509P.
PR 22-SEP-2000; 2000US-234567P.

LOCUS H05625
 DEFINITION y17ob12_s1 Soares, infant brain 1NIB Homo sapiens cDNA clone
 IMAGE 43318 3', mRNA sequence.
 ACCESSION H05625
 VERSION H05625.1
 KEYWORDS EST
 SOURCE human.
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.
 REFERENCE 1 (bases 1 to 353)
 AUTHORS Hillier,L., Clark,N., Dubuque,T., Elliotson,K., Hawkins,M., Holman
 ,M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marrs,M., Parsons,J.,
 Rifik,L., Rohlfing,T., Soares,M., Tan,F., Trevaskis,E., Waterston,
 ,R., Williamson,A., Wohldmann,P. and Wilson,R.
 TITLE The WashU-Merck EST Project
 JOURNAL Unpublished (1995)
 COMMENT Contact: Wilson RK
 Washington University School of Medicine
 4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
 Tel: 314 286 1800
 Fax: 314 286 1810
 Email: est@wustl.edu
 High quality sequence stops: 291
 Source: IMAGE Consortium, LINTL
 This clone is available royalty-free through LLNL; contact the
 IMAGE Consortium (info@image.llnl.gov) for further information.

FEATURES	Seq primer: Promega - 21m13 High quality sequence stop: 310. Location/Qualifiers
source	1..353
/organism="Homo sapiens"	
/db_xref="GDB:415859"	
/db_xref="taxon:9606"	
/clone="IMAGE:43318"	
/clone_id="Soares infant brain LNIB"	
/sex="female"	
/dev_stage="3 days post natal"	
/lab_host="DNI08 ('ampicillin resistant")	
/note="Organ: whole brain; Vector: Lafmid BA; Site_1: Not I; site_2: Hind III; 1st strand cDNA was primed with a Not I - oligo(dT) primer [5'-ACATCGAAGAAATCGCGCGCGGAATTCTTTTTTTTTTTTTTTT-3']; double-stranded cDNA was ligated to Hind III adaptors (Pharmacia), digested with Not I and directionally cloned into the Not I and Hind III sites of the Lafmid BA vector. Library went through one round of normalization. Library constructed by Bento Soares and M.Fatima Bonaldo."	
BASE COUNT	107 a 53 c 72 g 116 t 5 others
ORIGIN	

